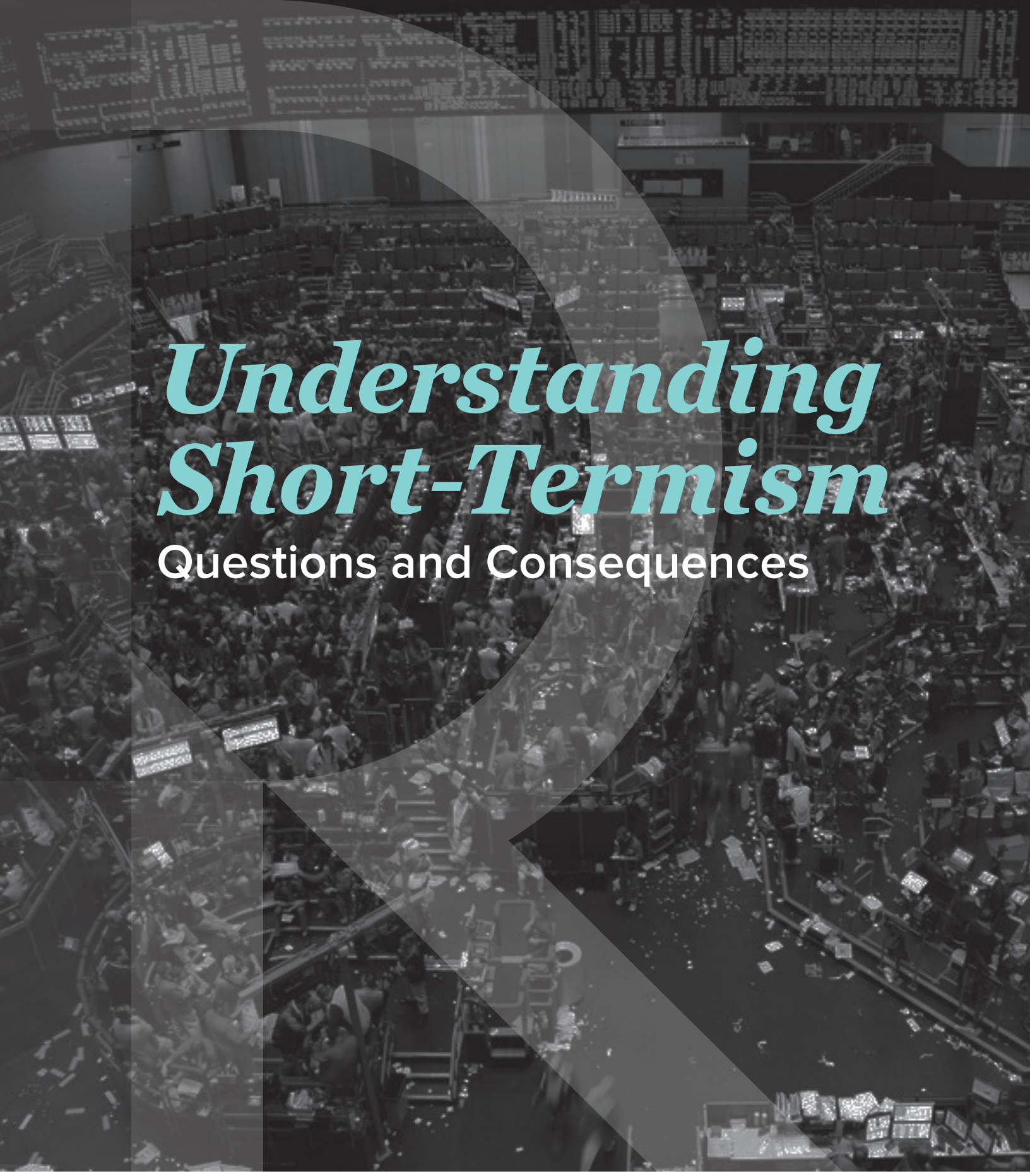

Understanding Short-Termism

Questions and Consequences

Report by
J.W. Mason
November 6, 2015

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ABOUT THIS REPORT

This report is released by the Financialization Project as part of the Roosevelt Institute's comprehensive *Rewriting the Rules* agenda, which seeks to level the playing field and grow the American economy. The Financialization Project, led by Roosevelt Institute Fellow Mike Konczal, studies how the economy has been transformed by the growth of the financial sector beyond its core savings function, finance's increased power over the real economy, the increased influence of wealth, and the reduction of all of society to the realm of finance. In addition to clarifying the concept of financialization, it aims to develop a research and policy agenda to halt these trends and restore an economy that works for everyone.

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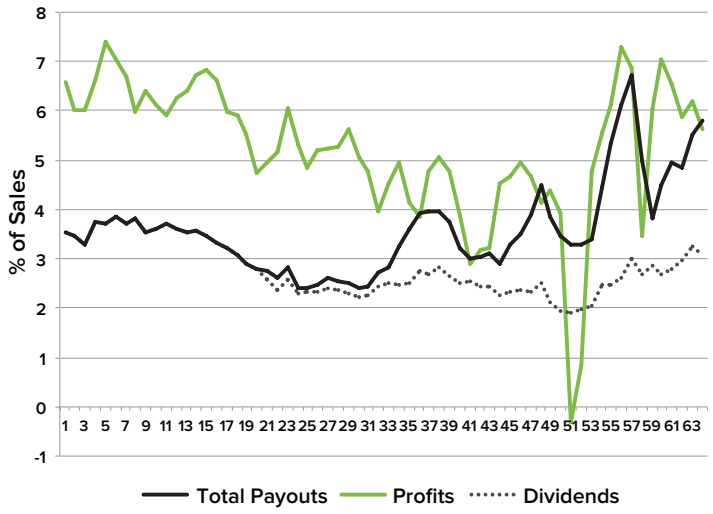
Introduction

Five years after the end of the recession, economic activity in the U.S. remains below potential. One important explanation for this slow growth is that business investment remains weak compared to previous economic recoveries. To an increasing number of observers, weak investment appears to be related to the rise in what experts are calling "quarterly capitalism" or "short-termism"—the focus on short time horizons by both corporate managers and financial markets, prioritizing near-term shareholder interests over the long-term growth of the firm.[1]

Short-termism is most apparent when assessing the increase in funds paid out by corporations to shareholders over the last three decades. Before the 1970s, American corporations consistently paid out around 50 percent of their profits to shareholders, retaining the remainder for reinvestment in the company. However, over the past 30 years, shareholder payouts have averaged 90 percent of reported profits. In recent years, including 2014, total payouts have been greater than total profits. This is largely due to buybacks—corporations' purchases of their own shares—which were almost nonexistent before the 1980s but now account for nearly half of corporations' payouts to shareholders (see Figure 1).

Figure 1: Profits and Payouts



Source: Compustat database; Roosevelt Institute analysis. Cashflow is profits plus depreciation.

This increase in shareholder payouts is closely linked to the transformation of American corporate governance that began in the 1980s, often described as the "shareholder revolution." Through most of the 20th century, American corporations were governed under a system best described as "managerialism," in which executives typically rose through the ranks at a single

company and had as their primary objective the survival and growth of the corporation itself.[1] Under this system, management saw itself as balancing the interests of a number of "stakeholders"—employees, customers, suppliers, regulators, creditors, and other firms in the industry. Shareholders were just one constituency among others. But over the past generation, there has been a revival of the notion that shareholders are the primary stakeholders, and that creating value for shareholders is the sole legitimate objective for management. This change in the self-conception of management evolved hand in hand with developments in law, ideology, and the structure of financial markets that have increased the power of shareholders to enforce their demands on managers. Higher payouts are one of the central demands of these empowered shareholders.

ADDRESSING THE CRITICS

Recent discussion of short-termism has resulted in a wave of criticism claiming that it is not real or not a problem. Under scrutiny, these objections do not hold up. The goal of this paper is to address the most common objections to the idea that short-termism is a serious problem for the economy. These objections fall into three broad categories.

Short-Termism Is Not Real

A common response to worries about short-termism is that it is not real. This viewpoint suggests that, although there may be noteworthy exceptions, overall, this is not an important problem for our economy. Spending on investment and research and development (R&D) is exactly where we would expect it to be, and perhaps even as high as historical trend.

James Surowiecki argues in *The New Yorker* that, as a whole, "corporate spending on R&D has risen steadily over the years, and has stayed relatively constant as a share of GDP and as a share of sales."[2] Mark Zandi of Moody's Analytics asks, if short-termism is a real problem, "what explains the fact that businesses are investing so much in research and development?"[3]

We document that this is incorrect, and that much of what appears to be a recent increase in business investment is due to changing methodology in how investment is measured. Weak investment spending has been masked by the overall weakness of the economic recovery. When properly accounted, real growth in investment spending over the business cycle is now at its slowest by far in the postwar era.

This has major implications for future recoveries as well: The delinking of record high earnings and expansionary monetary policy from investment is a troubling development. Full employment may be harder to maintain using conventional monetary policy when corporations are dominated by shareholders demanding quick payouts. Monetary policy may still work, but only by encouraging household borrowing, which carries its own serious risks and costs.

Short-Termism Is Not Harmful

A more common refrain is that while it is true that an increasing share of corporate surplus is paid out to financial markets rather than invested, this shift has been beneficial to long-term growth. According to this line of reasoning, the money leaving old firms is going to small startups, especially firms involved in innovative technology.

As Robert Samuelson describes in *The Washington Post*, "Investment funds are being channeled from slow-growing to fast-growing sectors."[4] *The Economist* notes that this system is best at "producing world-beating startups because it is better at shifting capital quickly to new opportunities."[5] Or, as Harvard Law professor Mark Roe puts it, "the cash should leave old-line firms with weak futures and end up where it can be deployed more effectively, benefiting the economy as a whole."[6]

We document that this is an inaccurate assessment of what is occurring in the economy. The data shows the link between cash and investment breaking across the economy as a whole, not just among older and more established firms. And instead of increasing, the share of investment coming from new and small companies is actually declining. There is no handoff to new firms.

Nor is there any sign that financial markets are directing funds toward technology-intensive industries. Over the past 15 years, the share of investment from tech

1 There is extensive literature on the rise and decline of managerialism over the 20th century. For a comprehensive introduction, see chapter 3 of Davis, Gerald. 2011. Managed by the Market. Davis, Gerald. Managed by the Market. Oxford: Oxford University Press.

companies has steadily declined. Tech industries have increasingly become sources of funds for the financial system. Payouts in dividends and buybacks from tech industries have actually increased more quickly than payouts from publicly traded firms in general. Rather than reinvesting profits into technology firms, the finance industry is increasingly getting money out of them.

More broadly, the scale of money that finance is taking out of firms is an order of magnitude greater than estimates of the money that finance puts into firms. Total shareholder payouts in 2014 were over $1.2 trillion, while general estimates show that money going from investors to businesses in the form of IPOs and venture capital (VC) is less than $200 billion. This implies that for every $1 invested by finance more than $6 is taken out by finance.

Short-Termism Is Not Any of Our Business

A final argument is that whether or not the short-term orientation of corporations and finance supports investment, it is not an appropriate question for public policy. Since shareholders own the firm, this view says, they should make the calls. If shareholders, and the corporate managers who work for them, do not see any value to higher investment, then it is not the place of the public to second-guess them. Letting financial markets decide where the surplus goes will produce the best outcomes for everyone. Or, at the very least, it cannot do any real harm, since the money will be spent one way or another.

As economist Ryan Drecker notes, "those shareholder payouts go somewhere," and thus drive aggregate economic trends.[7] Robert Samuelson argues, "Shareholder payouts boost consumer confidence and spending."[8] More generally, a common response to criticism of short-termism is that it is the sole responsibility of the firm to act in the interests of shareholders.[9]

But short-termism does have consequences. In a demand-constrained economy, a reduction in investment by one firm will tend to reduce, not increase, investment by other firms. To the extent that corporate profits end up paying for higher consumption by wealthy households, or for salaries in the financial system, they are not contributing to the development of the country's productive capacities or to a long-term increase in the standard of living.

In general, investments have positive externalities. When corporations invest more, it has a range of positive spillover effects for the development of technology, the dissemination of new skills, and more. The most innovative businesses tend to be firms that prioritize growth and carry out investment that may turn out to be unprofitable for the owners of that particular firm but is critical to creating new markets, developing a critical mass of skilled workers, pioneering new products, and so on. When corporations cease to invest, these benefits also decline.

From a social standpoint, short-termism exacerbates inequality. Most Americans own little or no stock and therefore do not benefit from higher share prices or larger payouts. The bottom 50 percent of households own just 9 percent of shares. Stock ownership is significantly concentrated, with just 4 percent of households owning a majority of all shares. Rather than having a democratizing effect, the concentration of income from capital is one of the primary drivers of inequality.

As long as corporations are simply conceived of as machines for increasing share value, they will be unable to fully utilize America's collective productive capacities or develop those capacities for the future.

The remainder of this paper is organized as answers to 12 common questions about short-termism and shareholder payouts. Questions 1 and 2 reflect the first objection, that short-termism is not a real issue. Questions 3 through 7 reflect the second objection, that shareholder payouts are just a way of allocating capital more efficiently. And questions 8 through 12 reflect the third objection, that both normatively and practically shareholders are the ones who should decide what to do with a corporation's surplus funds.

A companion report, "Ending Short-Termism," develops a policy agenda to respond to this economic challenge.

1. Why are we worrying about businesses not investing enough? Hasn't business spending on investment—and especially R&D—recovered strongly since the end of the recession?

Contrary to some sources, business investment is not where it needs to be. Much of the recent increase is due to the changing methodology of what counts as investment. In addition, recent weakness in investment spending has been masked by the overall weakness of the recovery. When properly accounted, real growth in investment spending over the business cycle is at its slowest by far in the postwar era.

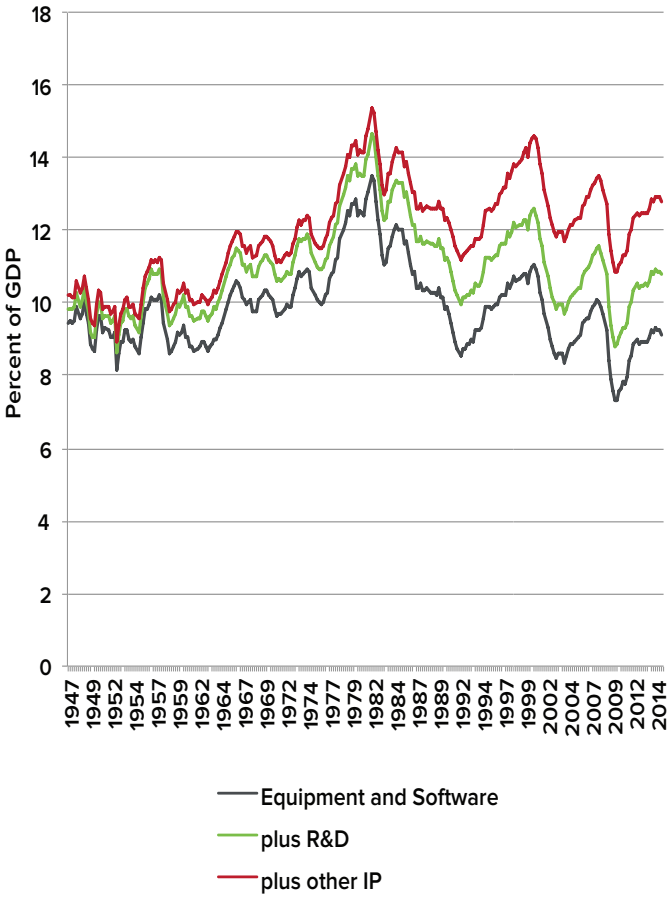
It is true that, measured as a share of gross domestic product (GDP), investment has fully recovered from its fall during the recession, and is now slightly above average by historical standards—12.8 percent of GDP, versus a postwar average of 12.0 percent. But this is misleading for several reasons.[10]

First, the U.S. Bureau of Economic Analysis (BEA) recently redefined "investment" to include not just spending on structures, equipment, and software, which is what businesses classify as investment in their own accounts, but also R&D spending and the development of "intellectual property" of all sorts, including costs associated with the creation of movies, television shows, etc.[11] When we define investment in a more conventional way, it remains below average as a share of GDP.

More importantly, the use of GDP as a denominator is misleading, since the recent recovery has been exceptionally weak by historical standards. Since low investment itself results in lower GDP, the investment-to-GDP ratio is not a good guide to the strength of investment. A more meaningful metric is real growth in investment spending over the business cycle, and the most recent cycle shows by far the slowest investment growth in the postwar era—no matter how investment is defined.

Finally, it's important to remember that this very weak investment is occurring in what should be an exceptionally favorable environment, with credit cheap and abundant and corporate profits at record highs. The reason interest rates have been held at zero over the past six years, and the reason for the unconventional expansionary policy carried out by the Fed, is precisely to boost investment spending, to offset the weakness of other sources of demand. If, under these conditions, American business is turning in its worst-ever investment performance—indeed, even if it were only turning in an average one—that represents a serious breakdown of policy. Over the past three decades, the U.S. —like most other rich countries—has come to rely almost exclusive on monetary policy to maintain full employment and stable prices. If the pressure to increase payouts and the larger short-term orientation of American corporations mean that said corporations no longer respond to abundant credit by increasing investment spending, then we must fundamentally rethink this approach. Figure 2 shows investment spending as a fraction of GDP.[12]

Figure 2: Total Investment



Source: National Income and Product Accounts, Roosevelt Institute analysis

The black line shows investment as the BEA defined

it until 2013, and as it continues to be defined under the generally accepted accounting principles (GAAP) followed by most U.S. businesses. This includes spending on new structures, on tangible equipment, and on software.[13] The red line shows investment as it is currently defined by the BEA, including spending on the development of intellectual property (IP) of all sorts. The green line shows traditional investment plus R&D spending, but not including spending on copyrighted artistic work.

Measured Investment Has Risen Because of a Change in Definitions

As Figure 2 makes clear, the biggest part of the 2013 change in the definition of investment was not the addition of R&D spending, but rather of spending on the development of TV shows, movies, music, and other forms of intellectual property (IP). These categories of spending now account for about 20 percent of official investment. While this kind of spending may fit with an abstract definition of investment, there is little reason to think that this kind of spending has the kinds of positive externalities—especially in terms of technological innovation—that traditional investment is widely agreed to have.

IP spending is not normally reported by businesses, and there was no standard series for it prior to the 2013 changes, so the older values for this series are retrospective estimates of uncertain reliability. So long-run historical comparisons based on the new series need to be treated very cautiously. By contrast, traditional investment spending—structures, equipment, and more recently software—is clearly defined in business accounting, and we can be confident that when we compare it in different periods we are looking at more or less the same kinds of spending.

If we look at investment as it is defined by GAAP, we see a clear trend of declining investment as a share of GDP since 1980. Still, as a share of GDP, investment appears to have recovered strongly from the recession. If GAAP investment is still below its long-term average share of the economy, R&D is above it; the two together are near historical average and well above the level of the 1950s, if still well below the levels of the investment booms of the 1970s and 1990s. So while excluding the development of movies, TV shows, etc., from investment makes it clear that recent investment has been mediocre, it does not appear exceptionally poor.

In Absolute Terms, Investment Growth Is Very Weak; This Is Masked by the Weak Overall Recovery

A more serious problem, however, is that using share of GDP to measure the strength of investment spending is fundamentally misleading. In effect, this grades investment performance on a curve: The same investment growth looks bigger in a weak recovery than in a strong one. What's more, investment spending is, itself, one of the main factors in determining the level and growth rate of GDP. Indeed, most macroeconomic forecasters consider investment spending the single most important factor in business-cycle fluctuations. [2]

If weak investment growth results in a lower overall level of economic activity, investment as a share of GDP will look higher. Conversely, an investment boom that leads to rapid economic growth may not show up as an especially high investment share of GDP. So to get a clear sense of the performance of business investment, we should look at the real growth of investment spending over a full business cycle, measured in inflation-adjusted dollars, not in percent of GDP. And when we do this, we see that the investment performance of the most recent cycle is the weakest on record—even using the BEA's newer, more generous definition of investment.

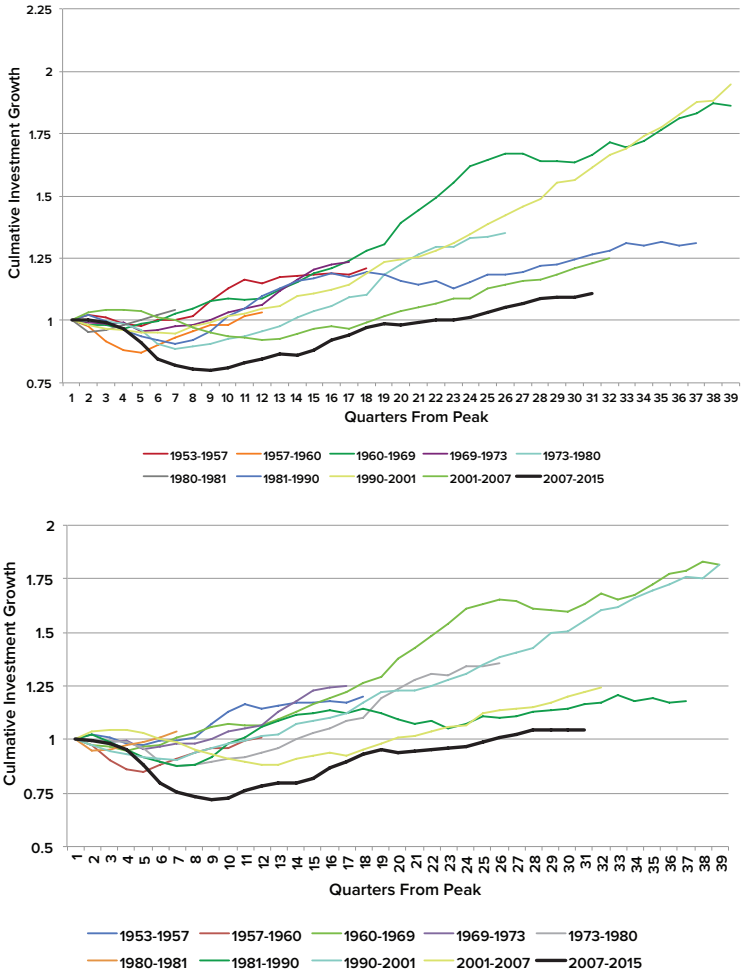
Figure 3a shows the cumulative change in real investment spending since the previous business-cycle peak, using the current (broad) BEA definition. (The inflation adjustment uses the same investment-goods price index as the BEA's measures of real investment.) Figure 3b shows the same thing, but uses the older, narrower GAAP definition. Data for both figures is taken from the aggregates published by the BEA, so it includes closely held corporations as well as publicly traded firms. As these figures show, the most recent cycle is a

2 For a recent discussion of the central importance of business investment for macroeconomic fluctuations, see:
Stiglitz, Joseph. 2015. "Toward a General Theory of Deep Downturns." (NBER Working Paper 21444).
For a classic statement, see Hyman Minsky's summary of the Keynesian vision of the business cycle as "an investment theory of fluctuations in demand and a financial theory of fluctuations in investment." See:Minsky, Hyman. 1975. John Maynard Keynes. New York: Columbia University Press, p. 55.

clear outlier in terms of both the depth and duration of the fall in investment during the downturn and, to an even greater degree, the slowness of the subsequent recovery.

Using the BEA measure, the initial fall was only moderately deeper than in other postwar cycles; what really stands out is the weak recovery. Using the GAAP measure, the most recent cycle is exceptional for the depth of the decline in investment spending in the recession as well as for its slow growth in the recovery. Measuring investment as plant and equipment plus R&D (not shown) gives an intermediate picture.

Figures 3a and 3b: Cumulative Growth of Broad (BEA) and Narrow (GAAP)



Source: National Income and Product Accounts, Roosevelt Institute analysis

As the figures make clear, the current business cycle has had by far the weakest investment growth of any in the postwar era, no matter how investment is defined.

Even using the BEA's more generous definition, it took more than five years for inflation-adjusted investment spending to recover to its previous peak. (By the narrower GAAP definition, it took six years.) Five years after the average postwar business cycle peak, BEA investment spending had already risen 20 percent in real terms. As of the second quarter of 2015—seven and a half years after the most recent peak, and six years into the recovery—broad investment spending was up only 10 percent from its previous peak. (GAAP investment spending was up just 8.5 percent.) In the four previous postwar recoveries that lasted this long, the improvement in real investment spending ranged from 21 percent to 63 percent over the same period.

The current business cycle has had less than half the investment growth of the weakest previous cycle, and it is worth noting that the next two weakest investment performances of the 10 postwar cycles came in the 1980s and the 2000s. In recent years, only the tech-boom period of the 1990s has matched the consistent investment growth of the 1950s, '60s, and '70s.

When we look directly at business investment spending, it is clear that there is a real problem here to be understood and, hopefully, solved. The weakness of investment spending has simply been masked by the overall weakness of the most recent recovery.

2. Does the economy really need more spending now? Isn't the Federal Reserve beginning to worry about the economy overheating?

Given low labor force participation, weak wage growth, and low inflation, the economy is running below potential and there is plenty of room for expanding investment. But even if there wasn't, the delinking of record high earnings and expansionary monetary policy from investment is a troubling development. It could mean that full employment will be harder to maintain using our current tools in an economy dominated by short-termism.

A few years ago, when unemployment was still high and GDP was clearly below potential, it was easy to make the case that low business investment was a

serious problem for the economy. Today, some people argue, it is not so clear. At 5.1 percent, unemployment is near the level that has traditionally been considered full employment. And with the Federal Reserve discussing an increase in interest rates, it appears that policymakers are more worried about demand being too strong than they are about it being too weak.

But in fact, there is still good reason to be concerned about the weakness of business investment discussed in the previous question. First, it is far from clear that the economy is operating at potential, or anywhere close to it. By other measures, demand still appears very weak.

Second, even if we do think that the economy today is operating near potential, there is still a larger structural problem. Investment today is lagging despite an extraordinary stimulus from abundant credit and very high profits. If this exceptionally favorable environment delivers only a weak—or even mediocre—level of investment growth, that suggests that the traditional macroeconomic tools for stabilizing demand are unlikely to be effective in the future.

Finally, the persistent weakness of investment demand makes the economy more dependent on other sources of demand to reach full employment, which may be hard to sustain. The previous cycle in the 2000s had the weakest investment performance prior to this cycle, and one result of that weakness was that the economy was able to reach full employment only thanks to the housing boom and the associated exceptionally strong demand from the household sector. As this experience suggests, even if output can reach potential on the basis of non-investment demand, there may be strong policy reasons to prefer an expansion built on investment growth.

The current state of demand in the U.S. relative to supply constraints is hotly debated. Answering this question is beyond the scope of this paper.[14] But on the face of it, standard measures of the level of activity relative to potential are not consistent with an economy in danger of overheating; rather, they suggest a substantial continuing shortfall in demand.

Between 1947 and 2007, long-run real GDP stayed very close to a trend of about 3 percent annual growth. Since 2007, GDP has fallen well below that trend and shows no signs of returning to it. Meanwhile, for the first time in 50 years, inflation has fallen persistently below the Fed's 2 percent target.

Over the past 30 years, a fall in unemployment has normally been associated with a rise in employment as a share of the population, and with an acceleration of nominal wage growth. Neither of these signs of labor market tightness are present in the current expansion.

Figures 4 and 5 show four measures of output relative to potential: inflation as measured by the consumer price index (CPI), real (inflation-adjusted) GDP relative to its pre-recession trend, the employment-to-population ratio, and nominal wage growth. None of these are consistent with an economy operating near capacity and in danger of overheating. Unless you believe that the 2008–2009 recession coincided with an abrupt slowdown in technological progress, output is still well below potential. The failure of the employment-to-population ratio to recover following the recession suggests that the fall in the measured unemployment rate is mainly due to discouraged workers exiting the labor force.

Figure 4: Inflation and Real GDP Growth

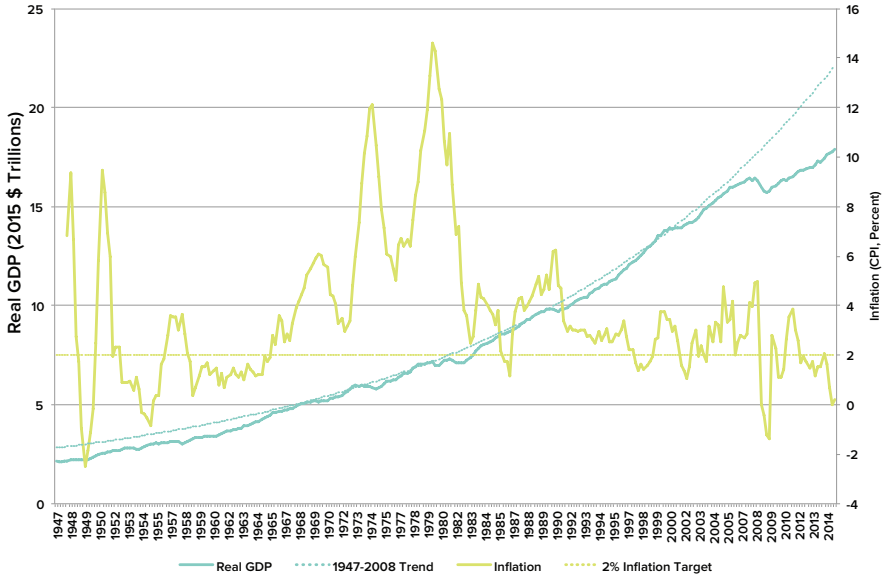
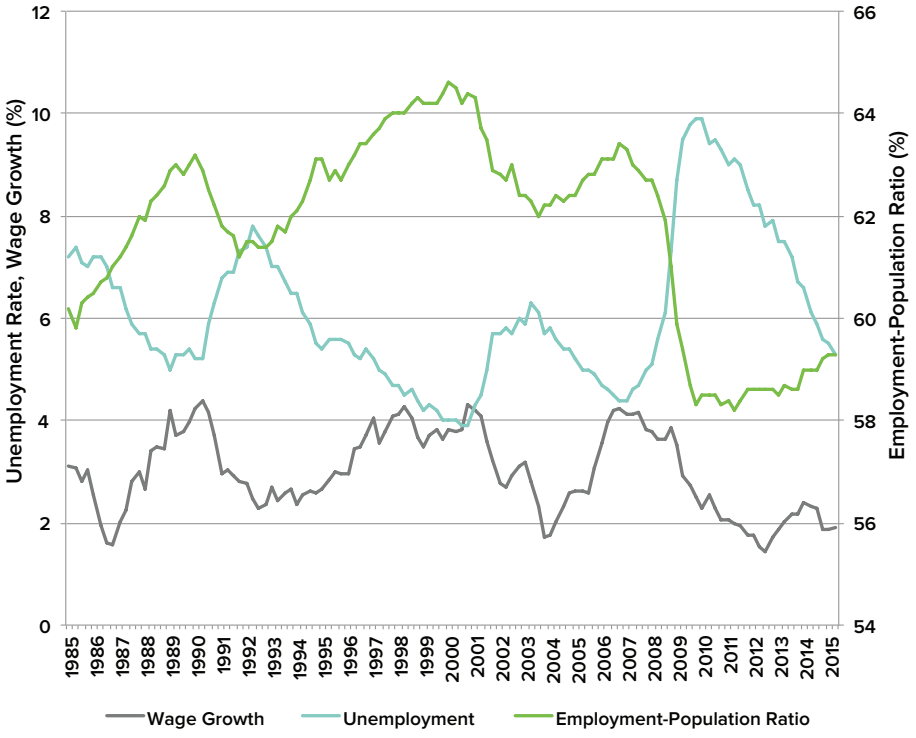


Figure 5: Labor Market Indicators



Sources: Bureau of Labor Statistics, Consumer Price Index (inflation); Bureau of Labor Statistics, Employment Situation (unemployment rate, employment-population ratio, and wage growth)

Similarly, the failure of wage growth to accelerate is inconsistent with a tight labor market in which businesses are facing a shortage of appropriate workers. Note that in the three previous recoveries, there was a strong acceleration of wage growth prior to the top of the cycle. In the current recovery, there has been no such acceleration; in fact, wage growth appears significantly slower today than it was a year ago.[15]

Finally, the most straightforward measure of slack in the economy, the inflation rate, shows no sign of acceleration. The headline measure of inflation, the Consumer Price Index (CPI), has been below the Fed's 2 percent target in 35 out of the past 36 months, and seems to be falling rather than rising. There have been several months this year in which the CPI has shown outright deflation for the first time since the end of the recession. (Other measures of inflation have behaved similarly.) Other than the headline U3 unemployment rate, almost every standard indicator suggests an economy that still faces a substantial demand shortfall and is operating well below potential. Using the simplest measure of potential, the pre-recession trend, the shortfall in output stands at nearly 15 percent—wider than it was at the bottom of the recession. In this straightforward sense, there has been no recovery toward potential output at all.[3]

In our view, this means that there is still good reason to believe that the economy is operating well short of potential, and that there is excess unemployment, with all the waste and hardship that goes with it, even if it does not show up in the headline unemployment rate.

But even if you believe that the economy is now close to its maximum sustainable level of investment, there are still solid macroeconomic reasons to be concerned about the ways that financial market pressures can hold back business investment. First, in the best case scenario, we have only reached something like full employment five years into a recovery characterized by extraordinary stimulus for business investment. This casts doubt on the effectiveness of traditional expansionary monetary policy, which will certainly be needed in the future. A second, related concern is that if investment responds only weakly to the availability of credit, a policy of easy money may instead end up encouraging other kinds of borrowing, which may be less sustainable or socially desirable.

The first of these points, the exceptionally favorable financial environment for investment, obviously includes low interest rates for business borrowers—which, while they were slower to come down than the policy rate set by the Fed, are now the lowest they've been in nearly 50 years. In addition, the volume of new borrowing by the corporate sector, while still short of historical highs, has recovered strongly since the recession and, at around 4 percent of sales, is well above its long-term historical average. So interest rates are not just low on paper: Recent years really have seen a large flow of credit to the business sector.

Earnings, meanwhile, are near their highest levels ever.

3 The apparent closing of the gap between current output and potential is entirely the result of lower estimates of potential output following the recession, rather than faster growth moving GDP toward the pre-recession trend.
Ball, Laurence. 2014. "Long-Term Damage from the Great Recession in OECD Countries" (NBER Working Paper 20185).

In 2014, corporations had cash flow from operations close to 14 percent of sales, a level never reached prior to 2000. And except for a brief dip during the recession itself, this extraordinarily strong cash flow has been sustained continuously throughout the past 15 years (see Figure 1). The weak performance of investment is much more puzzling when we consider these very favorable financing conditions for the corporate sector.

That is the puzzle that this project is intended to address: not just the absolute level of investment, but the delinking of investment from the changes in financial conditions that were long thought to be its main drivers.[16] And this is not just an academic question; macroeconomic policy today depends almost exclusively on shifting private spending levels by adjusting the cost and availability of credit. Traditionally, it was assumed that investment was the category of spending most sensitive to these adjustments. If this is no longer the case, then in a real sense the monetary policy steering wheel is no longer connected to the wheels of the economic car. This is a serious concern regardless of whether the car happens to be headed in the right direction at the moment.

The housing boom provides a clear example of this. In the mid-2000s, the U.S. economy did seem to be operating close to potential by conventional measures, even if labor markets were never as tight as in the previous decade.[4] And it is not controversial to suggest that the Fed's expansionary policy contributed to the recovery after the dot-com bust. But business investment in the 2000s was fairly weak—again, as Figure 2 shows, the weakest (using the BEA measure of investment) of any postwar cycle before the current one. Instead, expansionary policy and abundant credit operated, even more than was usual during cyclical expansions, through the housing market.

In 2005, it was easy to say that low investment was not a problem since GDP was growing along its long-term trend and unemployment was low and falling. But it is clear now that, even from the narrow perspective of macroeconomic policy, one dollar of spending is not the same as another. Boosting the economy by easing credit conditions is more likely to produce instability when the spending it induces comes from the household sector rather than the business sector.

Some people see this problem and suggest that we should give up on the idea that low rates and easy credit can be used to keep the economy at full employment. There may be something to this if it means a greater role for fiscal policy and other tools of demand management, though not if it means, as it often seems to, abandoning full employment as a macroeconomic policy goal. But before we give up on monetary policy, it is worth asking why it no longer affects business investment as reliably as it once did. One likely culprit is the shareholder revolution and related changes in financial markets.

3. Aren't shareholder payouts just a way to move capital from established corporations to newer, faster-growing ones?

The data shows the link between cash and investment breaking across the economy as a whole, rather than just among older and more established firms. And instead of increasing, the share of investment coming from new and small companies is actually declining over this time period. There is no sign of capital being reallocated to new firms.

People often suggest that high shareholder payouts are just a way of reallocating funds between businesses. Thanks to high dividends and share repurchases, the earnings of established corporations can be used to finance investment at smaller, newer companies with better growth prospects.

There are several reason to think this is not true. First, the link between cash inflows and investment has gotten weaker for the economy as a whole, not just for individual corporations. This suggests that there is something going on beyond reallocation of funds between businesses. Second, the era of shareholder dominance has seen a long-term decline in the share of investment that goes to smaller and newer firms, and in the economic activity of those firms in general.

The link between funding and investment has broken for the corporate sector as a whole; it's not just a matter

4 During the later 1990s, the unemployment rate was below 5 percent for over four years, and fell as low as 3.8 percent. During the 2000s, by contrast, unemployment was below 5 percent for less than two years and never fell below 4.4 percent. Similarly, the employment population ratio reached 64.7 percent at the peak of the 1990s expansion, compared with 63 percent at the peak of the 2000s expansion. See Figure 5.

of funds shifting between firms

If increased shareholder payouts markets were mainly reallocating funds between businesses, then we would expect increased earnings or borrowing in the corporate sector to be associated with a rise in investment somewhere, even if not in the firms that initially received the new funds. But this is not the case—or at least, it is much less the case than it used to be. The weakening of the aggregate relationship between cash flow from operations and borrowing, on the one hand, and investment, on the other, suggests that higher payouts from one business are not translated into more investment funding for some other business.

Table 1, reproduced from Roosevelt's "Disgorge the Cash" report, shows the correlations between various sources and uses of funds for the corporate sector as a whole.[17] Note: Since the data is taken from the financial accounts, it includes closely held corporations as well as publicly traded ones. As the second row shows, in the postwar decades each additional dollar of earnings flowing into the corporate sector was associated, on average, with an additional 48 cents of investment spending; today it is associated with only 22 cents of investment spending. The relatively high r-squared of the earlier period indicates that the high-investment years were, by and large, the high-profit years; the much lower r-squared for the most recent period indicates that this correlation no longer exists to any significant degree. These changes in aggregate relationships suggest that we are not just looking at a shift in investment spending across businesses or industries, but a change in the degree to which corporate profits finance investment at all.

Table 1: Changing Correlations Between Corporate Sources and Uses of Funds

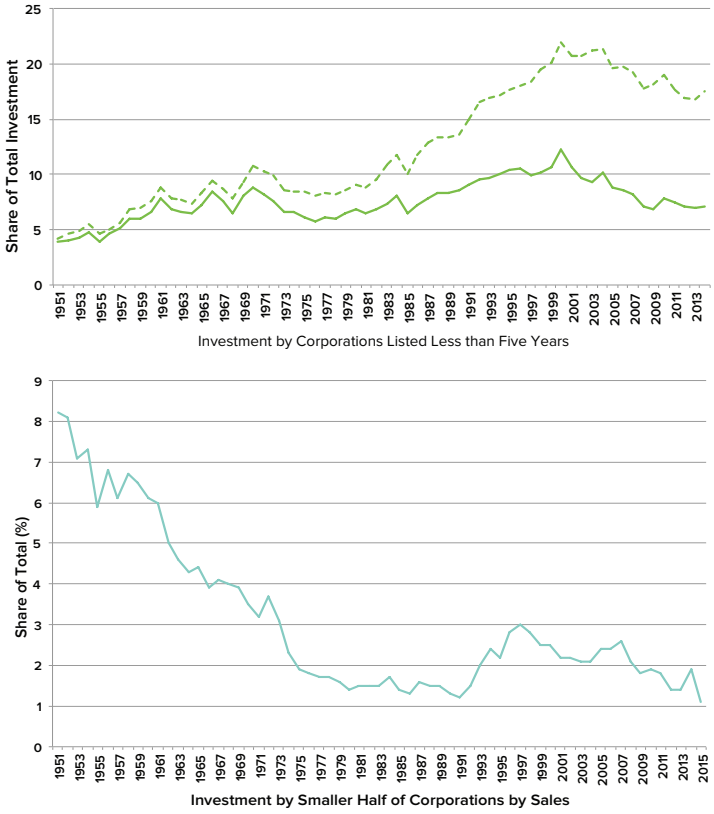
Regression	1952-1984		1985-2013	
	Coefficient	r^2	Coefficient	r^2
Investment on Borrowing	0.20 (0.03)	0.22	0.15 (0.03)	0.22
Investment on Cashflow	0.48 (0.07)	0.28	0.22 (0.08)	0.07
Payouts on Borrowing	0.16 (0.03)	0.17	0.49 (0.07)	0.03
Payouts on Cashflow	0.25 (0.07)	0.09	0.78 (0.21)	0.11

Source: Roosevelt Institute, "Disgorge the Cash"

The Share of Smaller and Younger Firms is Shrinking, Not Growing

Second, when we look at the share of smaller and newer businesses in the economy, we see no sign that they have benefited from easier access to funds. Figure 6 shows the share of investment spending accounted for by publicly traded corporations in their first five years after listing, as a fraction of all investment by publicly traded corporations. This shows a clear cyclical pattern, rising in booms and falling in downturns; not surprisingly, it was particularly high during the tech boom period around 2000.

Figure 6: Investment Spending by Newer and Smaller Corporations



Source: Compustat data, Roosevelt Institute analysis

Note: These figures are based on data for publicly traded corporations, taken from the Compustat database. Investment is defined here to include R&D spending. For the investment share of newly listed corporations, the years 1973–1976 are excluded because the expansion of coverage in 1973 distorts the apparent number of younger firms for those years.

But there is no long-term upward trend; on the contrary, during the past decade the investment share of younger

corporations has been near record lows. As for the share of investment going to small firms, also shown in Figure 6, it has steadily declined since the 1950s apart from, again, a temporary spike during the tech-boom period. Like the investment share of newer firms, the investment share of small firms is now at its lowest level ever.

4. Don't shareholder payouts help to reallocate capital to high-technology sectors in particular?

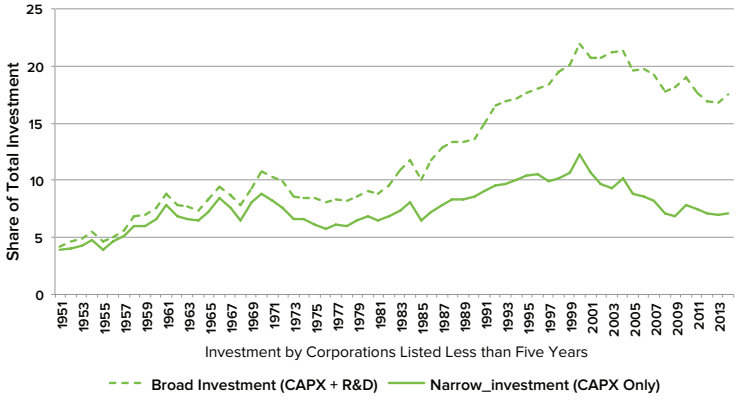
There is no sign that financial markets are directing funds toward technology-intensive industries. Over the past 15 years, the share of investment from tech companies has steadily declined. Tech industries have increasingly become sources of funds for the financial system. Payouts in dividends and buybacks from tech industries have actually increased more quickly than payouts from publicly traded firms in general. Rather than getting money into technology firms, finance is increasingly taking money out of them.

Many supporters of shareholder activism argue that high payouts are needed to free up capital for investment, not just in younger firms in general, but specifically in high-growth and high-technology sectors. Defenders of the American system of shareholder-dominated corporate governance often point to the success of American computer, software, and pharmaceutical companies as evidence of the system's dynamism. As we discuss in other sections, it is not clear that it makes sense even in principle to think about shareholder payments as "freeing" real resources for investment. But in any case, there is no sign that financial markets are directing funds toward technology-intensive industries.

Over the Past 15 Years, Investment in High-Tech Industries has Declined

There is no official definition of the tech sector, but economists often focus on six industries that are particularly oriented toward scientific research and technological innovation: drugs, computers and other electronic goods, communications equipment, medical equipment, scientific equipment, and software and data processing. This definition is widely used in the economics literature.[18] Figure 7 shows the share of total corporate investment accounted for by these industries, using both the broad definition now used by the BEA, which includes R&D spending, and the narrower definition used by corporations in their financial reporting, which includes only spending on plant, equipment, and software.

Figure 7: Investment Share of High-Tech Sector



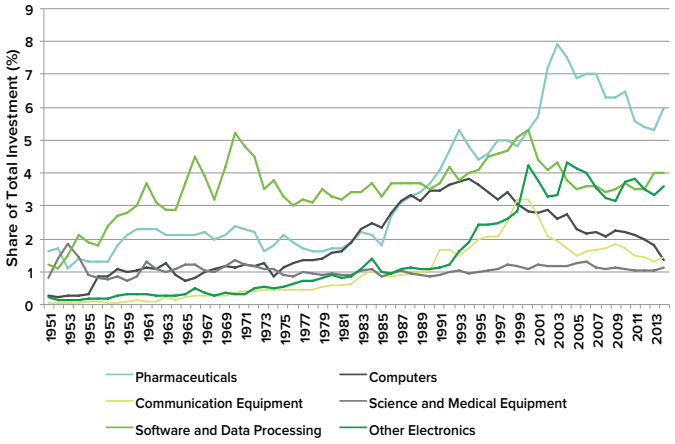
Source: Compustat data, Roosevelt Institute analysis

As the figure shows, R&D spending is very important for these industries; for the past 20 years, it has consistently exceeded investment spending as traditionally defined. Using the older, narrow definition, these industries account for no greater share of investment in the U.S. today than they did 50 years ago; with R&D included, their share of total investment has more than doubled. But by both measures, the investment share of the tech industries peaked around 2000. Over the past 15 years, their share of total investment has steadily declined.

By itself, this doesn't tell us anything about why investment has stalled in these industries since the end of the tech boom. But it does at least suggest some problems with a simple story in which financial markets reallocate capital from old industries to newer ones.

Figure 8 breaks out the industries within the high-tech group. Investment shown here is the broad measure, which includes R&D.

Figure 8: Investment Share of Specific High-Tech Industries



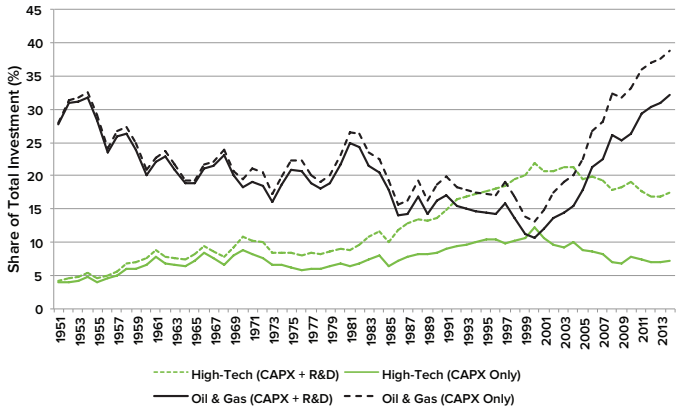
Source: Compustat data, Roosevelt Institute analysis

As the figure shows, the decline in investment is consistent across the high-tech sectors. While the exact timing varies, in the 1980s and 1990s all of these sectors saw a rising share of investment; in the past 15 years, none have. So we can safely say that in the universe of publicly traded corporations, the sectors we think would benefit from reallocation of capital were indeed investing heavily in the decades before 2000, but since then, they have not been. The decline in investment spending in the pharmaceutical industry—which, again, includes R&D spending on new drugs—is especially striking.

While Tech Investment has Declined, Investment in Fossil Fuel Industries has Grown

Rather than the high-tech industries, the growth in investment over the past 15 years has been concentrated in fossil fuel extraction and related industries. This is shown in Figure 9.

Figure 9: Investment Share of High-Tech and Fossil-Fuel Sectors



Source: Compustat data, Roosevelt Institute analysis

The red lines show broad and narrow investment for SICs 101-138, 291-299, and 492, which are oil and gas and related industries. Either way you measure investment, the increase over the past 15 years has dwarfed that in any other industry. Note that oil and gas, unlike the high-tech industries, is less R&D-intensive than the corporate sector as a whole. Looking only at plant and equipment, fossil fuels account for 40 percent of total corporate investment; by this measure, in some recent years, investment here has exceeded that of all manufacturing together. With R&D included, fossil fuels still account for about a third of corporate investment.

While the growth of the U.S. fossil fuel industry in recent years is familiar, the extent to which it dominates business investment is not widely recognized. There are obvious policy reasons to be concerned about the growth of fossil fuel extraction, especially with respect to climate change. For our purposes, however, the important point is that it is highly unlikely that the growth of these industries has depended on financing from shareholder payouts.

Businesses in the technology sector face special challenges in raising external finance: They are disproportionately likely to be startups, the winner-take-all nature of competition in these markets creates risks not found elsewhere, and a large portion of their value comes from proprietary technology, access to skilled labor, and other assets that are difficult or impossible to use as collateral.[19] [5] These obstacles to conventional financing explain why specialized venture capital institutions have grown up specifically to finance these firms. These obstacles also give some prima facie plausibility to the idea that financing constraints limit the growth of high-tech firms and could be relieved by the flow of new funds into financial markets.[20] These special conditions do not apply in the oil and gas industry. Investment there is much more likely to be limited by expected profitability than by financing constraints.

The shift toward high shareholder payouts is even more pronounced in the tech sector than elsewhere.

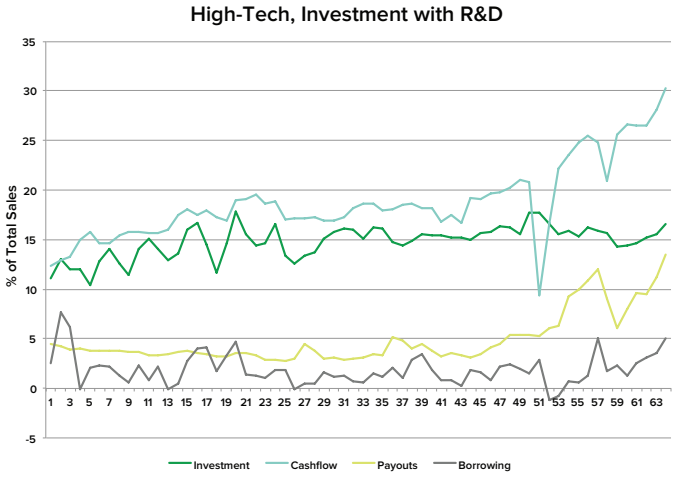
Figure 7 suggests that until the year 2000 or so, financial markets were indeed supporting investment in technology industries, or at least not obstructing it. Accounts in the business press suggest that the shift

5 "Financing constraints... may restrict R&D much more than other forms of investment. Reasons include the lack of collateral value for R&D 'capital' and firms' need to protect proprietary information."

toward shareholder dominance and high payouts came later to these industries than to others. For example, Apple did not pay dividends or engage in significant stock buybacks prior to 2012, preferring to retain funds to finance growth internally rather than distributing them, as shareholders would have preferred. Since then, however, Apple has succumbed to pressure from activist investors and begun making very large distributions of cash to shareholders. In 2014, it paid out $56 billion in dividends and repurchases, more than twice as much as the next-highest corporation (see Table 2).[21]

To investigate this more systematically, Figure 10 shows total cash flow from operations, borrowing, investment, and shareholder payouts for corporations in the six tech industries. (Investment includes R&D spending; all are given as fractions of total sales.) Compared with the flows for publicly traded corporations as a whole, it's clear that these have always been high-profit and high-investment industries (at least when R&D is included in investment.) It's not surprising that high levels of these two flows would go together: Firms with higher fixed costs will only be viable if they generate larger cash flows to cover them.

Figure 10: Profits, Investment and Payouts, High-Tech Corporations



Source: Compustat data, Roosevelt Institute analysis

What stands out in this picture is how the trends in the corporate sector as a whole since the 1980s have been mirrored even more strongly in the tech industries since the 1990s. These industries have become dramatically more profitable over the past 15 years; in 2014, cash flow from operations averaged 30 percent of sales in these industries, and reported profits averaged 12 percent of sales—more than double the figures for publicly traded corporations as a whole. Despite this, they have not increased their investment spending.

So to an even greater extent than corporations in general, the tech industries have increasingly been sources of funds for the financial system, not users of funds from it. Payouts in the tech industries have also increased even more quickly than they have for publicly traded corporations in general. Before 1985, shareholder payouts in the tech industries averaged 3.5 percent of sales, close to the average for the corporate sector as a whole. But over the past decade, tech payouts have averaged a full 10 percent of annual sales, compared with just over 5 percent for publicly traded corporations as a whole.

Table 2: Largest Shareholder Payouts, 2014

	Dividends	Repurchases	Total Payouts
Apple	11,215	45,000	56,215
Exxon	11,568	13,183	24,751
IBM	4,265	13,679	17,944
Intel	4,409	10,792	15,201
Royal Dutch Shell	11,843	3,328	15,171
Johnson & Johnson	7,768	7,124	14,892
Novartis	6,810	6,915	13,725
Cisco	3,758	9,843	13,601
Merck	5,156	7,703	12,859
Chevron	7,928	4,412	12,340
Pfizer	6,691	5,000	11,691
AT&T	9,629	1,617	11,246
BP	5,852	4,589	10,441
Oracle	2,255	8,087	10,342
General Electric	8,949	1,218	10,167

"Values in millions of dollars. Tech firms in bold.
Source: Compustat data, Roosevelt Institute analysis

In 2014, there were 15 corporations listed on U.S. stock markets with total shareholder payouts of $10 billion or more, as shown in the table below. Ten of the 15 were tech companies by the definition used here. Software, computers and other electronics, and pharmaceuticals are often held up as industries in which the U.S.

economic system, with its tolerance of high inequality and strong protections for property rights, is especially successful at fostering innovation. So it's striking that the leading firms in these industries are not recipients of funds from financial markets, but instead make the largest payments to them.

It's hard to argue that Apple and Merck represent mature businesses without significant growth prospects. And note that, apart from GE (which is not listed in the high-tech sector as defined here, but arguably should be), all the other top-payout corporations are in the fast-growing oil industry. This suggests the hypothesis that what distinguishes high-payout corporations is not the absence of investment opportunities, but rather the presence of large monopoly rents.

5. Are we missing the benefits of short-termism because money flowing out of large public firms is simply flowing into startups and small businesses not listed on the stock market?

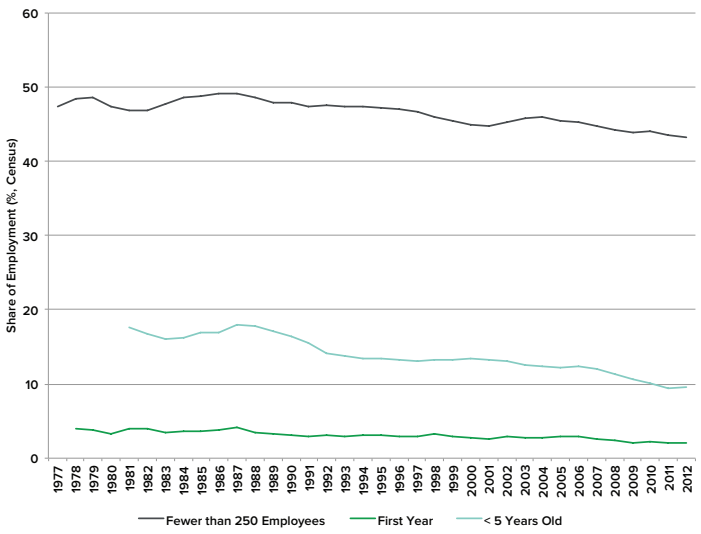
Though it is difficult to get data on all startup financing, it is easy to get data on employment. This data shows that there is no employment boom in small firms. Economists in general are worried about a decline in small business formation in recent decades, and do not believe a startup wave is currently happening.

Some critics of the Roosevelt Institute's "Disgorge the Cash" paper, and of similar work by William Lazonick and others, have argued that it is misleading to focus on corporations listed on stock exchanges.[22] When shareholder payouts are used to fund new investment, they suggest, it is most likely to be at startups and other privately held businesses. Could stagnant investment in publicly traded corporations just be the price of more rapid growth for small businesses that are not (yet) listed on stock exchanges?

It is true that startups, by definition, are not publicly traded, nor are many other businesses that may have the most difficulty getting access to finance. In an ideal world, we would certainly not limit our analysis to public traded firms. The problem is that, by their nature, publicly traded corporations are much more transparent than other kinds of businesses. It is hard to get good aggregate data on investment or financial transactions for closely held corporations. But employment data, which is a good proxy for funding data, does not support the idea that the increase in shareholder payouts has been accompanied by an increase in funding for startups.

Using data from the Census Survey of Business Dynamics, we looked at the share of employment accounted for by firms with fewer than 250 employees, firms in their first year, and firms less than five years old. Unlike the Compustat data, this covers all businesses in the U.S., regardless of how they are legally organized. The results are shown in Figure 11.

Figure 11: Employment Share of Smaller and Newer Businesses



Source: US Census Business Employment Dynamics

There is no sign here of a startup boom happening outside of the publicly traded corporate sector. Smaller businesses account for a share of employment that, while fairly stable, shows a clear downward trend. As for the share of employment in new businesses, by both measures it is about half what it was in the 1980s. No doubt there are some startups that find it easier to get funding today than in decades past, but it is clear that, in the aggregate, the success of financial markets in getting money out of established businesses has not been

matched by any similar success at getting money into smaller, newer ones.

Economists have noted the declining role of entrepreneurialism in the U.S. economy with concern. In the words of one recent study, "evidence accumulating from multiple datasets and methodologies suggests that the rate of business startups and the pace of employment dynamism in the U.S. economy has fallen over recent decades and that this downward trend accelerated after 2000."[23] This slowdown in new business formation may or may not be related to the increasing power and short-term orientation of financial markets that we focus on here. But at the very least, these findings show that shareholder dominance of public corporations has not led to the funding and growth of new businesses.

6. If investors get more income from shares, doesn't that mean they will invest more in new companies?

The vast majority of "investment" by private shareholders does not directly contribute any funding to the companies in which they invest, but instead simply bids up the prices of existing shares. Total shareholder payouts in 2014 were more than $1.2 trillion, but money moving from investors to businesses in the form of IPOs and venture capital is less than $200 billion. This implies that in the very best case, for every dollar invested by finance in the productive economy, six dollars are taken out.

A common response to concerns about high payouts and the short-term orientation of financial markets is that money paid out to shareholders will just be reinvested elsewhere.

The Vast Majority of Money "Invested" by Shareholders is Used to Purchase Existing Assets

But while private equity funds do replace existing management at corporations in which they buy shares, this form of active investment is very much the minority. The vast majority of "investment" by private shareholders does not directly contribute any funding to the companies in which they invest. Rather, it involves the purchase of existing assets from other owners of financial assets.

Suppose a wealthy investor receives $1 million from increased dividends on shares that he owns. Now ask: What does he do with that money? His liquidity has increased, as has his net wealth (since the higher dividends are unlikely to reduce the market value of the shares and may well increase them). The natural use of this additional liquidity and wealth is to purchase more shares. (If the shares are owned indirectly, through a mutual fund or similar entity, this reinvestment happens automatically.) But purchasing additional shares does not provide any funding for the companies "invested" in; it simply bids up the prices of existing shares and increases the liquidity of the sellers. Those sellers in turn may purchase more shares or other financial assets, bidding up their prices and passing the liquidity to their sellers, and so on.

This process does not continue indefinitely; at each stage investors may respond to their increased wealth by increasing their cash holdings or their consumption, and each transaction involves some payments to the financial industry. Eventually, the full payout will leak out through these three channels and share prices will stop rising. In the end, the full $1 million will be absorbed by the higher consumption and cash holdings induced by the higher share prices, and by the financial sector incomes generated by the transactions.

Not every share purchase involves an existing share, but the vast majority do. In 2014, there were $90 billion of new shares issued through IPOs on American markets—an exceptionally high number. By comparison, daily transactions on the main U.S. stock markets average around $300 billion.[24] [6] This implies that only one trade in a thousand on an American stock exchange involves the purchase of a newly issued share. And that is not counting the many ways other than outright share purchases (closed-end mutual funds, derivative contracts, etc.) that income from shareholder payouts can be reinvested in the stock market, none of which provide any new funding for businesses.

External financing for businesses is much more likely to

6 There are approximately 260 trading days in a year, giving an annual volume of $78 trillion.

take the form of debt than new shares. But here, again, we can't assume that there is any direct link between shareholder payouts and funding for other firms. Corporate bonds are issued by the same established corporations that are making the payouts.

Meanwhile, smaller and younger firms, both listed and unlisted, are dependent on bank loans for startup capital. But modern banks' lending is in no way dependent on prior saving. Their funding costs are closely tied to the short-term interest rate set by the Federal Reserve, while their willingness to lend depends on the expected riskiness of the loan. Thus there is no way for increased payouts to increase the availability of bank loans.

New bonds, on the other hand, do need to be purchased by someone, and it is possible that the market liquidity created by high payouts has helped hold down longer-term interest rates. But many other factors—especially the beliefs of market participants about the future path of interest rates—also affect these rates, so it is hard to see any direct link between payouts by some corporations and increased bond financing for others. Nor do new bonds necessarily finance investment. As we showed in "Disgorge the Cash," since the mid-1980s corporate borrowing has been more tightly correlated with shareholder payouts than with investment. So if payouts do spill over into the bond market, to a large extent they are simply financing themselves.

It is Mathematically Impossible for the Additional Funds that Financial Markets Direct to New Firms to Offset What those Markets Drain from Established Ones

Defenders of the current structure of American financial markets suggest that it is wrong to accuse the markets as a whole of short-termism, since for every established company being pressured to increase payouts, there is a startup getting funded despite any profits it might make being years away. We certainly don't want to deny that financial markets do often fund startups and other small, financially constrained firms, and these firms do sometimes undertake socially useful investment that established corporations, for whatever reason, do not. Shareholder payouts can support this kind of funding both directly, as shareowners put money into venture capital funds, IPOs, etc.; and indirectly, as higher share prices make it easier to raise funds through new offerings. But this optimistic view is not sustainable once we look at the magnitudes of cash flow involved. It is mathematically impossible for the additional funds that financial markets direct to new firms to offset what those markets drain from established ones.

As noted above, IPOs in 2014 raised a record $90 billion for newly listed firms. (Over the past 10 years, IPOs raised an average of $45 billion annually.) Secondary offerings by listed firms totaled $180 billion, but some large fraction of those offerings involved executives exercising their stock options rather than corporations raising new funding.

Prior to an IPO, venture capital funds are the most important non-bank source of external funding for new companies. In 2014, VC funds invested approximately $50 billion, but only $30 billion of this represented new commitments by investors; the remaining $20 billion came from the funds' own retained profits.[25] (And there is some double-counting between VC commitments and IPOs, since one of the main functions of IPOs today is to cash out earlier investors.) Net commitments to private equity funds come to perhaps another $200 billion, but very little of this represents funding for the businesses in which they invest— private equity specializes, rather, in buying control of corporations from existing shareholders.[26] All told, the flow of money from investors to businesses through these channels could not have come to more than $200 billion in 2014, and was probably less than $100 billion.

Meanwhile, total shareholder payouts in 2014 were over $1.2 trillion. So, at best, less than one dollar in 10 flowing out of publicly traded corporations went to fund a startup. Even this assumes that shareholder payouts are the only source of funds for IPOs and venture capital, but of course people also invest in these out of labor income (since most very high incomes in the U.S. take the form of salaries) and other sources. That means that the real fraction of payouts flowing to startups must be much smaller.

The financial pipelines flowing into new businesses are simply too constricted to accommodate the immense gusher of cash pouring out of established firms. Apple alone paid out $56 billion to shareholders last year,

or nearly twice total commitments to VC funds. (Intel, Oracle, IBM, Cisco and AT&T together paid out another $70 billion.) It is hard to imagine that venture capitalists are able to produce more value by investing $1 billion than an established company could produce by investing $10 billion.

7. Payouts must go somewhere, so if they are not invested, where do they go?

Money from shareholder payouts does not need to be reinvested. It may also fund higher consumption by shareholders. The short-termism of financial markets may be contributing to the consumption boom among America's rich.

Discussions of shareholder payouts often take for granted that shareholders automatically reinvest the income they receive from dividends and repurchases. As discussed above, "reinvestment" by shareholders need not provide any new funds to businesses, and in the vast majority of cases it does not. But there is no guarantee that paid-out funds will be reinvested even in the sense of being used to purchase securities issued by some nonfinancial business.

Shareholders can also use payouts to increase their own liquidity by increasing their holdings of cash or cash equivalents, or by paying down debt. (Even very high-income households typically have significant debt.) Payouts can also finance increased consumption. We cannot show a direct link between higher payouts and higher elite consumption, but to the extent that there has been a consumption boom over the past two decades, it has been concentrated at the highest income levels.[27] Something has been boosting consumption among the wealthiest households, and it is plausible that shareholder payouts are one important factor.

One puzzling feature of the recent macroeconomic history of the U.S. is that consumption demand has remained strong even though inequality has sharply increased. One of the strongest empirical regularities in modern economies is that high-income households spend a smaller fraction of their income on consumption than do low-income households.[28] It follows that a redistribution of income from lower- to higher-income households should reduce total consumption spending.

Why have we not seen such a reduction? One popular explanation is that middle-class and working-class households have used debt to offset stagnant incomes. If this were true, we should find that consumption inequality has increased by less than income inequality. But we do not. Rather, studies consistently find that consumption inequality has increased in line with income inequality. One of the most thorough recent studies, by Mark Arguilar and Mark Bils, concludes that "consumption inequality increased by 30 percent between 1980 and 2007, approximately the same as the change in income inequality."[29] For households lower on the income distribution, whose incomes were essentially flat over this period, consumption was also flat; in other words, there is no sign that household debt was used to maintain rising living standards. This should not be surprising, since households at the bottom of the income distribution do not have much access to credit; according to the Survey of Consumer Finance, only half of all households in the bottom 20 percent report holding debt of any kind.

Over the full post-1980 period, the entire rise in household debt can be explained by households facing lower inflation and higher interest rates; there is no reason to think that debt growth has contributed to consumption demand at all.[30] Meanwhile, households at the top of the distribution increased consumption spending right along with income—a puzzling exception to the normal pattern that the share of each additional dollar consumed falls as income rises. So if there has been "excess" consumption growth over the past 30 years, it seems to have been among the rich, not the middle class and poor. Looking at the 1989–2012 period, Steven Fazzari and Barry Cynamon find, even more dramatically, that the consumption-to-income ratio for the bottom 95 percent of households has actually declined slightly, from around 91 percent to 89 percent. Over the same period, the share of income consumed by the top 5 percent has risen from just over 80 percent to 88 percent.[31] Again, this suggests that if we want to explain how changes in the financial system have supported consumption growth, we should be focusing on the top of the income distribution, not the bottom.

High shareholder payouts are not the only factor

boosting consumption at the top. Status competition and the conspicuous consumption associated with it are probably important, along with opting out from public institutions (via private schools, private security, etc.) and the wealth effect from rising asset prices. But it is likely that higher shareholder payouts have also had an effect. In any case, the fact that consumption spending has risen most rapidly among the same households that own most corporate shares means by definition that these households have made less of their income available to fund new investment.

8. Whether it is reinvested or consumed, the money from shareholder payouts has to go somewhere. So won't it always boost demand one way or another?

It's natural to think that the money from shareholder payouts "has to go somewhere"—that in the worst case, higher consumption by shareholders still at least boosts demand. But the fundamental Keynesian insight is that total output is not fixed, but depends on the spending decisions of households and businesses. When corporations reduce investment, that does not simply reallocate resources, but leads to a lower overall level of income and production.

One common objection to the argument that high payouts discourage investment is that "the money has to go somewhere." One way or another, the money paid out by corporations will end up getting spent—hopefully on new investment elsewhere, but if not, then on consumption or on the operations of the financial sector. From an individual perspective, of course, this is true; if we follow an individual dollar of payouts, it does not disappear from the economy. And as noted above, it is quite likely that high payouts have boosted consumption by the rich households in which share ownership is concentrated.

But the fundamental Keynesian insight is that this is not true at the level of the economy as a whole. In the aggregate, income depends on spending just as much as spending depends on income. Corporate decisions about payouts and investment do not simply reallocate a fixed total income, but instead help to determine what total income will be. This is not a complicated idea, but it can be hard to grasp, since most of us are more used to the perspective of an individual household or business. So it is worth going through the logic in detail.

If we want to talk about the effect of a change in shareholder payouts at the aggregate level, we cannot only ask what happens to the shareholders who receive the payouts. As a matter of accounting, payouts cannot be changed in isolation. Some other use or source of funds has to change as well. So in addition to the effects of the payouts themselves, we also have to look at the effects of whatever other flows are changing. We will consider two cases: one in which a corporation funds higher payouts with new borrowing, and a second in which a corporation funds higher payouts by reducing investment spending.

In the first case, Firm A pays a special dividend of $1 million, financed by issuing $1 million in new bonds. The shareholders use the dividend payment to purchase the bonds. The net effect is that a $1 million liability has been added to the firm's balance sheet and shareholders have gained a $1 million asset. There is no leftover "money" that has to go anywhere.

In this scenario, the composition of shareholder balance sheets has changed: They have a greater proportion of safe, liquid assets, and probably a higher net worth. The additional debt on the balance sheet of the firm may depress its share price, but on the shareholder side, the higher proportion of safe assets will lead to increased demand for risky assets, bidding up share prices. (Of course, the price-depressing effect will be specific to firm A, while the price-boosting effect will be spread over shares in general. But again, at the aggregate level, this does not matter.) The firm still owes all its residual cash flow to the shareholders, and now owes them payments on the bonds as well. In effect, the shareholders have converted some of their residual claim on the firm to a fixed claim, shifting risk to creditors and other claimants.

Firm A is left with greater bankruptcy risk and a less liquid balance sheet; this will reduce both its desire to undertake fixed investment and its capacity to finance it. Meanwhile, the effect of the increased supply of bonds will be to reduce bond prices (i.e. raise interest rates) and raise share prices. This may make investment financing for other firms either easier or more difficult to obtain, depending on what kind of liability the firms

prefer to issue.[7] But there will be no net increase in the funds available for investment. The idea that "the money has to go somewhere" is based only on the new funds coming into financial markets from payouts, and ignores the money going out from new borrowing.

In short: If higher payouts are financed by balance sheet changes at the paying firms, then they involve offsetting sources and uses of funds from financial markets, and there is no leftover money that "has to go" anywhere. The increased illiquidity for the payout-making firms will depress their investment, and while it is possible that the payout-induced changes in the prices of different financial assets will ease the financing of investment elsewhere, there is no reason to expect this as a general rule.

When a Business Reduces Investment Spending, that Means Lower Sales and Profits at Other Businesses and Lower Output in the Economy as a Whole

Second, let us consider the case of a corporation that funds higher payouts by reducing investment spending. We will call it firm B. As discussed above, increased payments to shareholders will result in higher stock prices, plus some mix of new inflows into other businesses, higher consumption spending and more liquid balance sheets for wealthy households, and higher incomes in the financial sector via the (individually small, but numerous) transaction costs incurred along the chain of security trades initiated by the payouts.

The reduced investment spending, on the other hand, will mean lower fixed assets for firm B, and presumably lower future production and profits. But—and this is the key point that is often overlooked—this also means lower sales and profits for the businesses that produce investment goods. These businesses will in turn reduce their own production and investment.

This is the critical Keynesian insight—arguably the biggest macroeconomic idea of the 20th century: In a demand-constrained economy, a reduction in investment at one firm will tend to reduce investment at other firms, not increase it.

Here is another example: Let us suppose that businesses normally invest half their profits and pay the other half out to shareholders. Let us also suppose, for the sake of simplicity, that labor and other production costs are fixed. Now imagine that firm B decides to shift $100 from investment to payouts. That means a $100 increase in current income for its shareholders, but it also means a reduction of $100 in sales for the firm that supplies it with capital goods. Let us call this supplying firm, firm B.

With costs fixed, a reduction of $100 in sales means a reduction of $100 in profits. Since businesses in our hypothetical economy invest half their profits and pay out half to shareholders, firm B reduces payouts to its shareholders by $50 and reduces investment by $50. This in turn means that B's capital goods supplier, which we will call firm C, faces a $50 reduction in sales and profits. So C also reduces investment and payouts by $25 each. This means that, in this case, firm A's decision to increase payouts does not increase total payouts at all. Instead, it reduces the economy's total profits, total investment, and total output by $100 while leaving total payouts unchanged. The result of increasing shareholder payouts in this case is that shareholders end up with an equally large slice of a smaller pie.

Obviously, this is a very simple example; in a more realistic story, most of the income reduction would fall on wages rather than profits, and some would fall on the rest of the world. And the total reduction in income would depend on the propensities to consume out of labor and profit income. But unless every dollar of additional payouts is consumed, basic Keynesian logic tells us that a shift from investment to payouts must result in a fall in total output and income. This is because every dollar of payouts instead of investment is a dollar less of sales for the businesses producing investment goods. So if we are interested in what is happening at the level of the economy as a whole, we cannot ask how the shareholders are spending their increased incomes without also asking what spending is being cut in response to reduced incomes elsewhere.

The idea that "the money must go somewhere" makes sense only on an individual- or micro-level analysis, which implicitly treats the economy's total output as fixed. In general, there is no mechanism by

7 This would happen in a Modigliani-Miller world, but in such a world there would be no reason for firms to make payments to shareholders, let alone for the real resources spent on increasing them. For the classic statement of this "dividend puzzle" see Black, Fisher. 1976. "The Dividend Puzzle." The Journal of Portfolio Management, 2(2), 5-8.

which reduced investment by one company will lead to higher investment elsewhere. On the contrary, by reducing demand, a decision by one company to reduce investment will probably lead to further falls in investment elsewhere

A simpler way to see this is to imagine that you are a business owner. Now ask yourself: Would the depths of the Great Depression, in which business investment had fallen by over 90 percent from its 1929 high, be a particularly good time for your business to expand? The view that established firms must cut their investment spending if new firms are to increase theirs is reminiscent of the anti-Keynesian "Treasury view" of the 1930s, which claimed that increased spending on public works would simply crowd out an equal volume of private investment.[32]

9. Isn't following market signals by focusing on the share price the best way to encourage innovation and growth in the long run?

There's no reason to think that organizing production on the basis of shareholder value produces the best outcomes in terms of innovation or growth. Some of the world's most successful economies, such as Germany, have corporate governance systems that give shareholders much less power than in the U.S.

It is sometimes argued that, even if other stakeholders legally and morally have as good a claim on the surplus generated by a corporation as the shareholders do, it still makes sense to make shareholder value the sole objective pursued by management. The reasoning is that having a single, unambiguous, easily monitored objective makes it easier to hold managers accountable, and over the long run, businesses will find that the best way to boost the value of their shares is to innovate and invest wisely. In this view, it does not matter so much what happens to money paid out to shareholders; the important thing is that pressure to deliver those payouts will create the best incentives for managers.

By its nature, this is a hard claim to prove or disprove. Economic growth is subject to many influences, and it is hard to isolate the effects of shareholder power for good or for ill. But cross-country evidence suggests that, at least, there is not a strong link between high share prices and economic success more broadly.

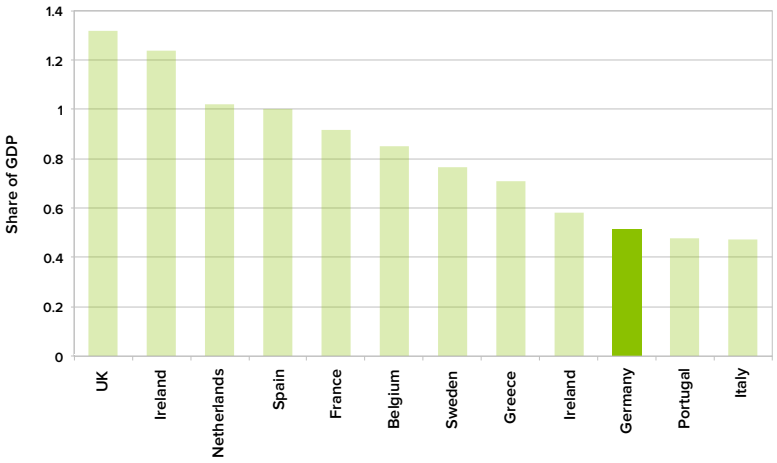
We can see this clearly if we look at Europe. It is well known that Germany is the continent's economic superpower, racking up huge trade surpluses on the strength of its dominance in advanced manufacturing. German firms are leaders in many technology-intensive industries, and Germany, unlike most European countries, has enjoyed solid growth and low unemployment in recent years. Yet surprisingly, this success is not reflected in the market wealth of German households. In a recent survey by the European Central Bank, the median German household reported net worth of just €50,000, compared with €100,000 in Greece, €110,000 in France, and €180,000 in Spain. The pattern is essentially the same if you look at assets rather than net worth: Median household assets are lower in Germany than almost anywhere else in Europe, including the crisis countries of the Mediterranean. The low wealth of most German households is all the more surprising given that the country has among the most equal distributions of income in Europe.[33]

One explanation for this is the low rate of homeownership in Germany. But another important piece of the puzzle is the low stock market valuation of German corporations. The per capita value of the capital stock appears to be more than twice as large in Germany as in Spain. Yet the average financial wealth of a household in Germany is only 25 percent higher than that of a household in Spain. Evidently a dollar of capital in a German firm is worth much less to its ultimate owners than a dollar of capital in a Spanish (or French, or Italian, etc.) firm. This suggests that economic success does not translate reliably into success at creating shareholder value—or vice versa.

Figure 12 compares the ratio of stock-market capitalization to GDP for a number of European countries. As the figure shows, during the 2000s shareholder value was lower in Germany, relative to the size of the economy, than in almost any other European country. Again, it is clear that the strategies followed by German corporations were successful at developing highly competitive industries, but they were not successful at generating wealth for shareholders. In 2007, just before the financial crisis,

the market capitalization of German corporations was 52 percent of GDP, lower than any other major European country except Italy and the fifth lowest of the 20 European countries for which data is available. Market capitalization was substantially higher relative to GDP in Spain, Ireland, and Greece, and much higher in Iceland—countries that would soon fall into deep crises. The value of corporate shares was also much higher, relative to GDP, in France and the UK, and has continued to be since the crisis—yet the real economic performance of these countries has been mediocre at best compared with Germany's.

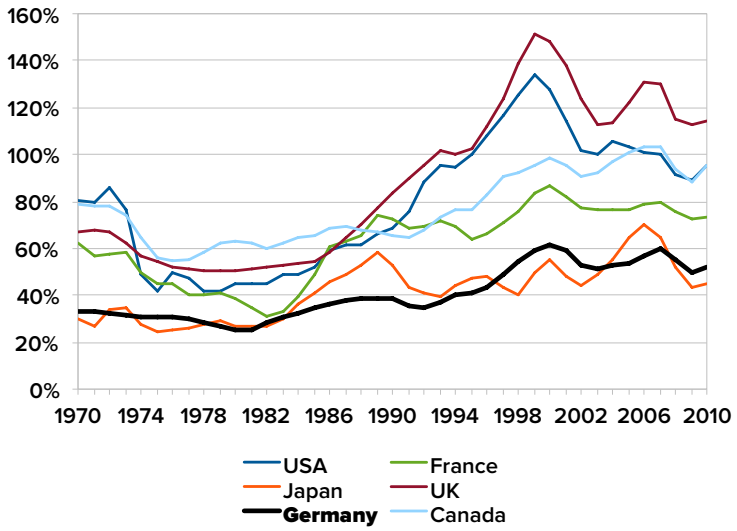
Figure 12: Stock Market Capitalization



Source: Eurostat, Roosevelt Institute analysis

Figure 13, based on data from Thomas Piketty shows a similar picture.[34] Here we are looking at Tobin's q—the ratio of the market value of corporate shares to the replacement value of corporations' assets less their debt. In theory, this is a measure of how successfully firms are at choosing investment levels to maximize shareholder value. If q is greater than 1, then each dollar of net assets is generating more than a dollar of shareholder value, implying that firms should be investing more. If q is less than 1, each dollar of assets is generating less than a dollar of value of value for shareholders, implying that the firm is—from the perspective of shareholders—investing too much. (In practice, there are a number of complications. For example, shareholder value–maximizing managers should strictly speaking set marginal q to 1, not average q. But it remains true that, the higher is q, the more successful the firm is in turning real resources into wealth for shareholders.)

Figure 13: Tobin's Q



Source: Thomas Piketty, *Capital in the 21st Century* online appendices

As the figure shows, by this measure, too, German corporations are laggards when it comes to the creation of shareholder value. Over the past 40 years, average q in Germany is barely half that in the other six countries for which Piketty has data. While q in the English-speaking countries is close to the shareholder-optimal value of 1, in Germany it is closer to 0.5. In other words, adding one dollar's worth of buildings, machines, patents, etc. to the capital stock of the typical German corporation adds only 50 cents to the wealth of its shareholders. From the point of view of the German shareholder, it would have been better to pay that dollar out in dividends.

Why are shares in German corporations worth so little, despite their evident success on measures like profitability or sales growth? Piketty and Gabriel Zucman have a suggestion:

"The higher Tobin's Q in Anglo-Saxon countries might be related to the fact that shareholders have more control over corporations than in Germany, France, and Japan. This would be consistent with [empirical work] that finds that firms with stronger shareholders rights have higher Tobin's Q. Relatedly, the control rights valuation story may explain part of the rising trend in Tobin's Q in rich countries.... [T]he "control right" or 'stakeholder' view of the firm can in principle explain why the market value of corporations is particularly low in Germany (where worker representatives have voting rights in corporate boards without any equity stake in the company). According to this 'stakeholder' view of the firm, the market value of corporations can be interpreted as the value for the owner, while the book value can be interpreted as the value for all stakeholders."[35]

German households, by this reading, are not really poorer than households in Spain or Greece (as common sense would confirm). It is just that they exercise more of their claims on the business sector as workers, rather than as shareholders.

At the least, the German example shows that delivering wealth for shareholders is not the only route to developing productive, internationally competitive corporations. But we could go further. Arguably, the feature of German corporations that makes them less valuable to shareholders is precisely what has made them more successful at developing new products and producing them competitively. The limits to shareholder control empower management to pursue long-term strategies without worrying about the need to deliver positive financial results every quarter or year. And the structures that allow workers to share in the governance of the corporation and the surplus it generates encourage worker loyalty and investment in industry- and firm-specific skills, without which high value–added production is impossible.

It is no coincidence that Europe's dominant economy has the least market wealth. The truth is, success in the global economy has depended for a long time on limiting dependence on asset markets. Germany, as with late industrializers like Japan, Korea, and now China, has succeeded largely by ensuring that investment is not guided by market signals, but through active planning by banks and/or the state. There's nothing new in the fact that greater real wealth in the sense of productive capacity goes hand in hand with less wealth in the sense of claims on the social product capitalized into assets.

10. If managers and shareholders don't see any worthwhile investment projects, why should we second-guess them?

There are good reasons for society to encourage a greater level of investment than a business might choose on its own. When the economy is operating below potential, productive resources are going unused, so there is no social opportunity cost to investment even if private returns are low. More generally, society favors a higher level of investment because we place a higher value on the distant future when thinking collectively than we do as individuals.

In general, we trust financial markets and business leaders to decide which investment projects are worthwhile and which are not. It is quite possible to look at the long-run investment picture, agree that financial market pressure is resulting in lower business investment, but not see any problem with that. If managers and shareholders agree that relatively few investment projects have returns that exceed the relevant cost of capital, then maybe the best outcome is that relatively few projects go forward.

But there are several reasons to think that the socially optimal level of business investment is substantially higher than the level preferred by financial markets. First, as long as the economy is operating below potential output, there is no real opportunity cost to higher investment. Second, investment spending often has positive externalities—meaning its social return is higher than its private return. Finally, most broadly, there is good reason to think that society as a whole places too little weight on future outcomes compared to present ones—that is, that we systematically apply too high a discount rate. So "excess" investment by prestige- or growth-chasing managers may offset a pervasive bias in the opposite direction.

When the Economy is Below Potential, there are No Real Opportunity Costs to Higher Investment.

As discussed in the response to Question 2, it is clear that the U.S. economy is still operating far below full capacity. The employment-to-population ratio stands at 59 percent, compared with 63 percent before the recession, and shows no sign of returning to its former level. Real GDP remains 16 percent below the level predicted by the pre-recession trend—a gap with no precedent in the postwar era.

Under conditions of depressed demand, "excess" investment is not just non-wasteful; it is positively desirable, since it reduces unemployment and creates demand for other businesses. This logic is often applied to government spending, but it applies just as much to private spending. In John Maynard Keynes' famous example, in a deep depression it would even be worth burying dollar bills in unused mine shafts, so that people could be employed digging them up. But we need not go to that extreme. Surveys of executives suggest that the "hurdle rate" for new investment is usually a

10% return or higher — a minimum required return that is surprisingly insensitive to changes in interest rates.[36] There must be an enormous number of potential investment projects that, while offering returns short of these high levels, still will yield some positive return.

When a firm's resources are viewed as its own property, the effective cost of internal finance will be lower than when its resources are viewed as the property of the shareholders. Reducing the pressure on managers to deliver short-term results could allow projects with lower, but still positive, returns to go forward.

Of course, these arguments only apply as long as the economy continues to be far from supply constraints. However, there is a broader issue even if the economy returns to something like full employment. Conventional macroeconomic policy operates through changing the availability of credit, but this only works to manage demand if there are sufficient units in the economy whose spending on goods and services depends on their ability to finance it. When shareholder pressure imposes a hard floor on the required return for new investment projects, changes in the availability of credit are less likely to affect the level of investment. This means that the increase in shareholder power threatens the effectiveness of monetary policy whether it is tightening or loosening. It also means that, to be effective, monetary policy must increase target spending by households rather than by businesses. As we saw in the housing boom, that is a very dangerous method of stabilizing aggregate demand.

Business Investment has Substantial Positive Externalities.

Beyond this, investment has many positive externalities. When corporations invest more, it has spillovers for the development of technology, the dissemination of new skills, and so on. In the most innovative parts of the economy, there are many firms that prioritize growth and carry out a high level of investment that may turn out to be unprofitable for the owners of that particular firm, but which is critical for creating new markets, a critical mass of skilled workers, new products, etc. So from a social standpoint, we almost certainly would prefer a higher level of investment than would be optimal for the individual business.

As a Society, We Place a Greater Value on Future Outcomes than is Reflected in Market Rates of Return

Economists have longstanding concerns that the discount rate that emerges from private choices in financial markets places too low a value on future goods relative to present goods. This is why economic policy often seeks to encourage saving and subsidize investment. But more recently, the issue of social discount rates has been crystallized in discussions of climate change policy. Addressing climate change requires incurring costs today for benefits that may be decades or even centuries in the future. This will only be justifiable if we place a relatively high value on future outcomes compared to to present ones. But as is widely recognized, the discount rates implied by market interest rates or equity returns imply a much lower value on future outcomes. So if we agree that addressing climate change is worthwhile, we must find reasons why the appropriate social discount rate is lower than the discount rate implied by market asset prices and returns.[37] It is not difficult to do so: Most obviously, private discount rates must reflect the fact that individuals are mortal, while society—barring asteroid impacts and similarly remote possibilities—lives forever. A long list of other reasons—from human psychology to imperfections in financial markets—could be added.

For present purposes, the important point is simply that the debates over the economics of climate change prevention have made it clear that the appropriate discount rate for public policy questions is considerably lower than the rate reflected in returns on financial assets. And once this principle is accepted, it applies to areas beyond climate change as well. Even if fixed investment does not usually involve time scales as long as climate change mitigation, it still involves incurring present costs to produce benefits many years in the future. The same factors that make market rates of return a poor guide to climate policy must make them poor guides to the true returns on private investment. In this sense, the supposed principal–agent problems that lead autonomous managers to overinvest may simply be offsetting other problems in financial markets that tend to undervalue long-term investment.[8]

8 For a survey of reasons why financial markets might produce excessively high discount rates, see Kocherlakota, N. R. 1996. "The equity premium: It's still a puzzle." Journal of Economic Literature.

11. Since shareholders own the business, aren't they entitled to higher payouts if that's what they want?

Despite popular perceptions, American law has never regarded shareholders as "owners" of the corporation, and this view has only recently become widespread in the business world. Nor is there any good moral or economic reason to think that business decisions should be made solely in the interests of shareholders.

Popular discussions of corporate governance often take it for granted that shareholders "own" the corporation in the same way they own their personal property, and the only duty of managers is to serve the interests of shareholders. But this is a myth. In American law, shareholders have never been considered owners of the corporation. Nor is there any basis for this view historically.

The claim that shareholders own the firm is often repeated but incorrect. Cornell law professor Lynn Stout bluntly summarizes the position of American courts on the rights of shareholders: "From a legal perspective, shareholders do not and cannot own corporations. Corporations are independent legal entities that own themselves.... Shareholders own... stock, [which] is simply a contract between the shareholder and the corporation, a contract that gives the shareholder very limited rights under limited circumstances." Nor is there any legal basis for the idea that shareholders are "residual claimants" on the corporation, except in the specific context of the disposal of assets in a bankruptcy proceeding.[38]

Corporations are a nexus of contracts and obligations, and shareholders are just one of many agents who have claims on a firm. Shareholders own stock but do not have traditional ownership rights to a firm because they cannot "freely access the company's place of business, exclude others, or decide what happens on a day-to-day basis."[39] Law professor Stephen Bainbridge uses the case of W. Clay Jackson Enterprises, Inc. v. Greyhound Leasing and Financial Corp to illustrate the fact that shareholders are not owners. In this case, it was stated, "even a sole shareholder has no independent right which is violated by trespass upon or conversion of the corporation's property."[40] In other words, shareholders do not have the right of use or possession of corporate property.

A number of legal experts believe the law states clearly that shareholders are not owners. Loizos Heracleous and Luh Luh Lan conducted a review of the legal theory and precedent literature spanning a hundred years and conclude that "the law provides a surprisingly clear answer: Shareholders do not own the corporation, which is an autonomous legal person."[41] Virgile Chassagnon and Xavier Hollandts conduct their own review of the corporate ownership debate and conclude similarly that shareholders are not owners of a corporation. They state that a firm is an independent entity that cannot be owned by any group, including shareholders.[42]

In reality, corporations are autonomous legal persons, not just vehicles for the management of shareholders' wealth. Corporations enter into contracts, own property, engage in lawsuits, and incur debts, all of which are their own, not the shareholders'. Shareholders have limited legal rights to vote on the board and certain other matters, on terms set by the board itself, and to receive a dividend, when and if the management and board choose to pay one.

And why should we expect anything else? Many other claimants—workers, suppliers, customers, communities in which the corporation operates, governments to which it pays taxes—have an interest in the survival and growth of the firm, and various legal rights over it. Nothing distinguishes shareholders in this regard. The idea that shareholders "own" the firm, or are "residual claimants," assumes that everyone else involved in the production process has made a fixed one-time contribution, for which they have received a fixed payment. On this assumption, only shareholders have an interest in the success of the firm. But of course, many other stakeholders make an ongoing commitment to the firm, from workers who acquire specific skills and refrain from stealing and malingering to communities that grow up around particular employers. In an economic sense, all these stakeholders have contributed capital to the firm and are as entitled as shareholders to "ownership" of it. The idea that everyone except shareholders is engaged in one-off, arms-length transactions with the corporation with no regard for

whether it succeeds or fails does not survive a moment's thought about how real businesses operate.

12. Doesn't the focus on share prices and high payouts benefit ordinary people, who also own shares?

Most Americans own little or no stock ownership and do not benefit from higher share prices or larger payouts. The bottom 50 percent of households own just 9 percent of shares. Stock ownership is significantly concentrated, with just 4 percent of households owning a majority of all shares. Rather than having a democratizing effect, the concentration of income from capital is one of the drivers of inequality. solely in the interests of shareholders.

It is widely believed that stock ownership in the U.S. is no longer limited to the rich. At various times, writers like Peter Drucker, Jeremy Rifkin, and Robin Blackburn have suggested that stock ownership by working people, especially through pension funds, has effectively socialized corporate America.[43] If this were true, we might still object to shareholder payouts on macroeconomic or efficiency grounds. But at least they would not be redistributing income upward or directly lowering living standards for ordinary Americans. In reality, however, claims about the democratization of stock ownership have been exaggerated. Most Americans own little or no stock and get no benefit from higher dividends and share repurchases.

According to the most recent Financial Account published by the Federal Reserve, about 15 percent of U.S. corporate equities are owned by foreigners. Another 20 percent is owned by pension funds and insurance companies. The remaining two-thirds is owned by households, either directly or through mutual funds and the like.[44] Household stock ownership remains highly concentrated. The majority of shares are owned by the richest 4 percent of households, with incomes of $250,000 or more, according to NYU economist Edward Wolff.[45] Another 25 percent is owned by the 15 percent of households with incomes between $100,000 and $250,000. Meanwhile, the 50 percent of households with incomes under $50,000 own just 9 percent of shares. Grouping by wealth rather than income, share ownership is even more concentrated. The wealthiest 5 percent of households own more than two-thirds of all shares, and the bottom 60 percent own just 2.5 percent. (All these numbers include indirect ownership through mutual funds and defined-contribution retirement plans.)

The significant share of stocks owned by defined-benefit pension funds and life insurance companies means that many working-class households do still see some benefit from higher payouts. But overall, stock ownership is far from democratic. It remains highly concentrated among the very rich.

Conclusion

A broad social change inevitably raises many questions, not all of which can be answered precisely. Making sense of the shift toward shorter-term horizons in corporate management and financial markets, and of the broader legacy of the shareholder revolution, is an ongoing challenge. But there is no question that this shift is real and important.

Despite optimistic efforts to spin the aggregate statistics, or to elevate anecdotes about individual companies, there is no question that the reluctance of business to invest is a drag on both current demand and long-term growth. There is also no question that shareholders' power within the corporation has greatly increased compared with a generation ago, and no question that one of the main uses of that power has been a dramatic increase in the share of corporate surplus paid out to shareholders. It is not obvious that these two phenomena are linked, but we believe there is clear and compelling evidence that they are. From a macroeconomic standpoint, perhaps the most important consequence of the shareholder revolution has been to break the link between the cash available to corporations and their investment spending.

By any reasonable measure, business investment is weak. Not coincidentally, so is aggregate demand, which remains, by most metrics, very far from potential five years into the recovery. The extraordinary measures taken by the Federal Reserve to stimulate the economy have had limited success at best. While some commenters blame this failure on the Fed itself, we believe the problem is more likely to be located in

the "transmission belt" of monetary policy within the corporate sector. When managers are concerned mainly or solely with short-term movements of the stock price, even the most abundant credit may not convince them to increase real investment spending.

Some people, looking at these facts, will simply reassert their faith in financial markets. If shareholders are demanding high payouts, they will say, it must be because they have identified better uses of funds elsewhere. Indeed, the fact that investment decisions are made by financial markets rather than within corporations is supposed to be a source of great dynamism for the American economy: It allows resources to be reallocated from old sectors to new, growing ones.

Claims like these justified the shareholder revolution—the shift in resources and authority from managers to markets that began in the 1980s. But as this report shows, these promises have not been fulfilled.

There has been no boom in investment, even as financial markets have supposedly eased the way for promising new projects to get funded. The period of shareholder dominance and high payouts has been associated with a decline in investment and employment at smaller, younger firms—just the opposite of what we should see if high payouts are reallocating capital from established businesses to new ones. It is true that, in the 1990s, high-tech sectors did see high investment, with the stock market making some contribution. But the shift in investment spending toward the high-tech sectors ended with the bursting of the tech bubble in 2000; over the past 15 years, it has reversed, with investment in high-tech sectors declining in favor of investment in the ultimate smokestack industry, fossil fuel extraction.

The failure of the shareholder revolution to deliver on its promises should not be surprising. The scale of payouts from established companies is simply too large, by an order of magnitude, for the financial markets to direct it all to new firms and industries through its limited channels. And from a Keynesian standpoint, there is no reason to expect a decline in investment in one sector to be helpful or necessary for an increase elsewhere. Rather, by pressuring managers to pay out funds instead of investing them, shareholders are simply reducing production and income in the economy as a whole. If anything, this creates a less favorable environment for investment at new firms.

The bottom line is simple: When financial markets demand immediate payouts, it makes long-term investment difficult. This is bad for demand today and bad for innovation and growth in the future. Shareholder payouts do not, in general, reallocate resources. By diverting funds from the corporate sector into the maelstrom of Wall Street, payouts may contribute to higher consumption among wealthy owners of financial assets and higher incomes in the financial sector, but they leave us all poorer than we would be in a world where the money had been used for productive investment.

Finally, we should be clear that shareholders do not possess an inviolable legal or moral claim to the surplus generated by "their" corporations. Shareholders represent a narrow segment of the public; working- and middle-class Americans own only a small fraction of corporate stock. The interest of a small group of wealth shareholders in immediate payouts does not trump the interest of society at large in a productive corporate sector and in a rising standard of living over time.

We do not have to accept the current short term–focused, finance-dominated corporate regime as a fact of life. The example of Germany, a country that leads the world in high-value exports despite offering shareholders much less income and authority than in the U.S., demonstrates that there are viable alternatives to our current finance-dominated corporate sector. An overnight transformation of the economy is not, of course, possible, and there is no silver bullet solution to the problems of short-termism and excessive payouts. But there are steps we can take to ensure that corporations once again serve as vehicles for organizing our collective productive activity rather than as ATMs for shareholders.

An accompanying report, Ending Short-Termism, develops a policy agenda to respond to the economic developments discussed here. We believe the steps it lays out represent a meaningful path away from what Hillary Rodham Clinton has called "quarterly capitalism." But beyond the specific proposals, the most important step is to identify the problem. As long as corporations are simply conceived of as machines for increasing share value, they will be unable to fully utilize America's collective productive capacities or develop those capacities for the future.

Endnotes

1 Ross Sorkin, Andrew. 2015. “BlackRock’s Chief, Laurence Fink Urges Other C.E.O.s to Stop Being So Nice to Inves tors.” New York Times. Retrieved October 23, 2015 (http://www.nytimes.com/2015/04/14/business/dealbook/black rocks-chief-laurence-fink-urges-other-ceos-to-stop-being-so-nice-to-investors.html?_r=0).

2 Surowiecki, James. 2015. “The Short-termism Myth,” August 24, The New Yorker. Retrieved October 23, 2015 (http:// www.newyorker.com/magazine/2015/08/24/the-short-termism-myth).

3 Zandi, Mark. 2015. “What Hillary Clinton Gets Wrong About ‘Quarterly Capitalism’: Businesses Are Actually More than Ever in R&D,” July 24, New York Daily News. Retrieved October 23, 2015 (http://www.nydailynews.com/opinion/ mark-zandi-hillary-wrong-quarterly-capitalism-article-1.2303721).

4 Samuelson, Robert. 2015. “Shareholder Capitalism on Trial,” March 18, Washington Post. Retrieved October 23, 2015 (https://www.washingtonpost.com/opinions/shareholder-capitalism-on-trial/2015/03/18/f510b15a-cd80-11e4-a2a7-9517a3a70506_story.html).

5 No author. 2015. “The Tyranny of the Long Term,” November 22, The Economist. Retrieved October 23, 2015 (http:// www.economist.com/news/business/21633805-lets-not-get-carried-away-bashing-short-termism-tyranny-long-term).

6 Roe, Mark. 2015. “Short-Term Talk, Long-Term Cost,” October 20, Project Syndicate. Retrieved October 23, 2015 (https://www.project-syndicate.org/commentary/corporate-short-termism-imaginary-threat-by-mark-roe-2015-10).

7 Drecker, Ryan. 2015. “Articulating my confusion: Shareholders vs. the real economy,” February 25, Updated Priors. Retrieved October 23, 2015 (http://updatedpriors.blogspot.com/2015/02/articulating-my-confusion-shareholders.html).

8 Op. Cit. Samuelson.

9 Friedman, Milton. 1970. “The Social Responsibility of Business is to Increase its Profits,” September 13, New York Times Magazine. Retrieved October 23, 2015 (http://www.colorado.edu/studentgroups/libertarians/issues/fried man-soc-resp-business.html)s

10 Bureau of Economic Analysis. 2015. National Income and Product Accounts Table 1.1.6. Washington, DC: U.S. Department of Commerce. Retrieved May 5, 2015 (http://www.bea.gov/itable/).

11 Bureau of Economic Analysis. 2013. Preview of the 2013 Comprehensive Revision of the National Income and Product Accounts: Changes in Definitions and Presentations. Washington, DC: Bureau of Economic Analysis, U.S. Department of Commerce.

12 Bureau of Economic Analysis. 2015. National Income and Product Accounts, Table 5.2.5 lines 10 and 19, Table 5.2.6 line 18, and Table 5.6.5 line 6. Retrieved October 30, 2015 (http://www.bea.gov/itable/).

13 Bureau of Economic Analysis. 2013. “Frequently Asked Questions: How did BEA change the treatment of spending for research and development during the 2013 comprehensive revision?” Washington, DC: Bureau of Economic Analysis, U.S. Department of Commerce. Retrieved October 20, 2015 (http://www.bea.gov/faq/index.cfm?faq_ id=1028).

14 Yellen, Janet L. 2015. “Recent Developments and the Outlook for the Economy.” Speech delivered by Federal Reserve Chair Janet L. Yellen on July 10, 2015 at the City Club of Cleveland in Cleveland, Ohio. Retrieved October 20, 2015 (http://www.federalreserve.gov/newsevents/speech/yellen20150710a.htm).

15 Brainard, Lael. 2015. “Economic Outlook and Monetary Policy.” Speech delivered by Federal Reserve Governor Lael Brainard on October 12, 2015 at the 57th National Association for Business Economics Annual Meeting in Washington, DC. Retrieved October 20, 2015 (http://www.federalreserve.gov/newsevents/speech/brainard20151012a.htm).

16 Konczal, Mike and Nell Abernathy. 2015. “Defining Financialization.” New York, NY: The Roosevelt Institute. Retrieved October 20, 2015 (http://rooseveltinstitute.org/sites/all/files/Defining_Financialization_Web.pdf).
Mason, J.W. 2015. “Disgorge the Cash: The Disconnect Between Corporate Borrowing and Investment.” New York, NY: The Roosevelt Institute. Retrieved May 8, 2015 (http://rooseveltinstitute.org/sites/all/files/Mason_Disgorge_the_ Cash.pdf).

17 Op. Cit. Mason

18 Brown, J. R., and Steven M. Fazzari, and B. C. Petersen. 2009. “Financing innovation and growth: Cash flow, external equity, and the 1990s R&D boom.” The Journal of Finance, 64(1):156. See also the sources cited there.

19 Ibid.

20 Janeway, William H. 2012. Doing Capitalism in the Innovation Economy: Markets, Speculation and the State. New York: Cambridge University Press.

21 Rushton, Katherine. 2014. “Apple to return $130bn to shareholders,” April 23, The Telegraph. Retrieved October 20, 2015 (http://www.telegraph.co.uk/finance/newsbysector/mediatechnologyandtelecoms/electronics/10784073/Apple-to-return-130bn-to-shareholders.html).

22 Lazonick, William. 2014. “Taking Stock: Why Executive Pay Results in an Unstable and Inequitable Economy.” New York, NY: The Roosevelt Institute. Retrieved October 20, 2015 (http://rooseveltinstitute.org/sites/all/files/Lazonick_Executive_Pay_ White_Paper_Roosevelt_Institute.pdf).
Lazonick, William. 2014. “Profits Without Prosperity.” Harvard Business Review September 2014. Retrieved September 25, 2015 (https://hbr.org/resources/pdfs/comm/fmglobal/profits_without_prosperity.pdf).

23 Decker, Ryan, John Haltiwanger, Ron S Jarmin, and Javier Miranda. 2014. “The Secular Decline in Business Dynamism in the U.S.” Suitland, Maryland: U.S. Bureau of the Census. Retrieved October 20, 2015 (http://faculty.chicagobooth.edu/workshops/ appliedecon/pdf/Haltiwangersecular.pdf).

24 BATS Global Markets. 2015. "U.S. Equities Market Volume Summary." Retrieved October 28, 2015 (http://www.batsglobalmarkets.com/us/equities/market_share/).

25 National Venture Capital Association, Yearbook 2015

26 Bain and Company, Global Private Equity Report 2015

27 Fazzari, Steven M and Barry Z. Cynamon. 2014. "Inequality, the Great Recession, and Slow Recovery." Retrieved October 18, 2015 (http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2205524).

28 Carroll, Christopher D. 2000. "Why Do the Rich Save So Much?" In Joel Slemrod, ed., Does Atlas Shrug?: The Economic Consequences of Taxing the Rich. Cambridge: Harvard University Press

29 Aguiar, Mark A and Mark Bils. 2011. "Has Consumption Inequality Mirrored Income Inequality?" (NBER Working Paper No. 1607). National Bureau of Economic Research. Retrieved October 20, 2015 (http://www.nber.org/papers/w16807).

30 Mason, J. W. and Jayadev, Arjun. 2014. "'Fisher Dynamics' in US Household Debt, 1929–2011." American Economic Journal: Macroeconomics 6(3):214-234.

31 Cynamon, Barry Z. and Steven M. Fazzari. 2014. "Inequality, the Great Recession, and Slow Recovery." Washington University in St. Louis. Retrieved October 20, 2015 (http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2205524).

32 Sidelsky, Robert. 1981. "Keynes and the Treasury view: the case for and against an active unemployment policy 1920–1939." In W.J. Mommsen (ed.), The Emergence of the Welfare State in Britain and Germany.

33 European Central Bank. 2013. The Eurosystem Household Finance and Consumption Survey, April 2013. (Statistics Paper Series No. 2). Retrieved October 28, 2015 (https://www.ecb.europa.eu/pub/pdf/scpsps/ecbsp2.en.pdf).

34 Piketty, T. 2014. Capital in the 21st Century. Cambridge: Harvard University Press. Online data appendices.

35 Piketty, Thomas, and Gabriel Zucman. 2014. "Capital is Back: Wealth-Income Ratios in Rich Countries 1700–2010." The Quarterly Journal of Economics 129(3): 1255-1310.

36 Sharpe, S., & Suarez, G. 2013. Do CFOs Think Investment is Sensitive to Interest Rates? (Federal Reserve Board of Governors FEDS Notes, 26). See also:
Jagannathan, Ravi, Iwan Meier, and Vefa Tarhan. "The cross-section of hurdle rates for capital budgeting: an empirical analysis of survey data." (NBER Working Paper 16770). National Bureau of Economic Research. Their survey of 127 CFOs of publicly traded nonfinancial corporations finds a median hurdle rate of 15%. This is consistent with:
Lane, Kevin and Tom Roswell. 2015. "Firms' Investment Decisions and Interest Rates". Reserve Bank of Australia Bulletin.
Poterba, J. M. and Summers, Lawrence. 1995. "A CEO survey of US companies' time horizons and hurdle rates." MIT Sloan Management Review 37(1):43.

37 Stern, Nicholas. 2008. "The economics of climate change." The American Economic Review:1-37.

38 Stout, Lynn. 2012. The Shareholder Value Myth. San Francisco, California: Berrett-Koehler Publishers, Inc.

39 Greenfield, Kent. 2012. "Are shareholders owners?" Policy Network. Retrieved October 29, 2015 (http://www.policy-network.net/pno_detail.aspx?ID=4259&title=Are-shareholders-owners).

40 Brainbridge, Stephen. 2011. "The Fundamental Error: Shareholder & Ownership." Retrieved October 29, 2015 (http://www.professorbainbridge.com/professorbainbridgecom/2011/11/the-fundamental-error-shareholders-ownership.html). Stephen Bainbridge is the William D. Warren Distinguished Professor of Law at the UCLA School of Law in Los Angeles.

41 Heracleous, Loizos and Luh Luh Lan. 2010. "The Myth of Shareholder Capitalism." Harvard Business Review. Retrieved October 28, 2015 (https://hbr.org/2010/04/the-myth-of-shareholder-capitalism/ar/1).

42 Chassagnon, Virgile and Xavier Hollandts. 2014. "Who are the owners of the firm: shareholders, employees or no one? " Journal of Institutional Economics 10:47-69. Retrieved October 28, 2015 (http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=9160025&fileId=S1744137413000301).

43 Drucker, P. F. 1976. The unseen revolution: How pension fund socialism came to America. London: Heinemann.
Rifkin, Jeremy and Randy Barber. 1978. The North will rise again: pensions, politics and power in the 1980s. Boston: Beacon Press
Blackburn, Robin. 2003. Banking on death, or, investing in life: The history and future of pensions. London: Verso.

44 Board of Governors of the Federal Reserve System, Financial Accounts of the United States, Table L. 213

45 Wolff, Edward N. 2012, "The asset price meltdown and the wealth of the middle class." (National Bureau of Economic Research, Working Paper No. 18559). Retrieved October 28, 2015 (http://www.nber.org/papers/w18559

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